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COMMISSIONERS ' JOURNAL.

By

(*Registered for transmission abroad.*)

No. 835. FRIDAY, JANUARY 3, 1862. Price 2d.

Applications for

(31*st December*, 1861, *and* 1st ... y, 1862.)

3260. WILLIAM TONGUE, of Chryssell Road, Brixton, in the county of Surrey, Engineer, for invention of "Improvements in the ... of certain descriptions of woven lo... net fabrics by the applicatio... materials thereto."—Dated ...

3261. ANDREW MACNA... Buildings, Chancery ... dlesex, for an inv... boxes for rail... to him from ... Illinois, ... Dece...

3266. FREDERICK TOLHAUSEN, Civil En...neer and Patent Agent ...f No. 35, Boulevart B...e-Nouvelle, P... the empire of France, ... inventi... method and machinery ... covering ... sed for petticoats and oth... nication to him by Antoine ... sident at No. 35, Boulevart ... in the empire of France.—...861.

... of 50, Chancery Lane, in ... Pa... for an ...

3272. Eugène Tiphagne, of 71, Rue des Marais, Saint Martin, Paris, in the empire of Fr... and Dominique Delbosque, of Noge... Marne, in the same empire of France, for an ... tion of "An improvement in advertisemen... Dated 31st December, 1861.

3273. Jean Baptiste Cretal... in the empire of Fran... invention of "A new pr... pipes."—Dated 31st D...

3274. Edward Thom... of Hughes and Son, ... cery Lane, London, for ... provements in saddles." — ... him from abroad by John B. ... the county of Westchester and s... and Thomas B. Peck, of New York ... of America.—Dated 31st December, 1861.

3275. Richard Archibald Brooman, of ... Fleet Street, in the city of London, ... Agent, for an invention of "Improvem... reviviffing animal black or charcoal, in ... ammoniacal gases generated in the revi... in the clarification of saccharine liquors, and ... apparatus employed in the revivification of the black, and in the filtering of saccharine liquors." — A communication to him from abroad by ... olon Hippolyte Lep... and Jules François ... seph Cuisinier, both of ... France."—Dated ... st December, 1861.

276. Alexander Edward ... of Dundee, in the cou... Britain, Spinners, for an ... ments in machinery or ... fibrous materials."—Da...

1. John Martin Roy... co... N...

6. Thomas Charles Clarke, of Liverpool, in the county of Lancaster, Civil Engineer, for an ... invention of "Improvements in the construction ... apparatus for heating and circulating water and ... ids."—Dated 1st January, 1862.

...ury, of Pendleton, near Man... ...ty of Lancaster, Mechanic, for ... provements in self-acting ... 1862.

... Archi... ooman, of 166, ... et Street, in the city ... n, Patent Agent, ... an invention of "Impr... in shears or ... ssors."—A communication to m... rom abroad ... Pierre Joseph Henninot and And... rpentier, ... of Caudry, France.—Dated 1st January, ...

...chard Archibald Brooman, of 166, ...et Street, in the city of London, Patent Agent, ...an invention of "Improvements in supporting ... propelling vessels." — A communication to ...rom abroad by Auguste Salzmann, of Paris, ...ce.—Dated 1st January, 1862.

...lia... of Tower Hill, in the county ... Engineer, for an invention of ... nibuses and other carriages." ... 862.

11. ... f Old Ford, Bow, for an inv... nts in forming or making strai... s and bends for pipes, and also vessels of various shapes, and in coating and protecting objects and articles of various forms ...nded to be employed for various purposes." ...anuary, 1862.

...field, of Ilfracombe, Devon, for ... "Improvements in lubricating ... working order axle journals ...lso to other journals and ...ary, 1862.

... of Highgate, in ..., for an inven... ...nufacture of ...herein."—

water, and other fluids, under any pressure, even the smallest, without making any change in the apparatus."—Dated 1st January, 1862.

18. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention for "Improved apparatus for roasting coffee."—A communication to him from abroad by Jean Louis Rivret-Justin, of 15, Passage des Petites Ecuries, Paris, France, Merchant. —Dated 2nd January, 1862.

19. Athanase Mathurin Pierre Airiau, of Paris, Rue St. Dominique, St. Germain, No. 8, (in the empire of France), for an invention for "A new musical instrument called 'lute organ.'"—Dated 2nd January, 1862.

20. William Atkinson Fell, of Troutbeck Bridge, Windermere, in the county of Westmoreland, Machine Maker, for an invention of "Improvements in the manufacture of bobbins [illegible] in the means or apparatus employed therei[illegible] Dated 2nd January, 1862.

21. Matthew Cartwright, of Carlisl[illegible] the county of Cumberland, Dentist, for an [illegible]tion of "Improvements in the manufacture of [illegible]dels and of 'plates' or 'pieces' for artificial [illegible]th." —Dated 2nd January, 1861.

22. George Jeffries, of Golden Ball Street, Norwich, Gun Maker, for an invention of "Improvements in breech-loading fire-arms and in apparatus for the manufacture of cart[illegible] Dated 2nd January, 1862.

23. Hermann Eschwege, of 14, [illegible]une, in the city of London, for an in[illegible] "Improvements in treating woad an[illegible] spirit."—Dated 2nd January, 1[illegible]

2293. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "An improved apparatus for the conveyance of medicinal substances into various parts of the human body."—A communication from Salvator Vinci, M.D., a person resident at No. 120, Rue de la Pepinière, Paris.

On his petition, recorded in the Office of the Commissioners on the 14th day of September, 1861.

2362. To Charles Board, of the city of Bristol, Cabinet Maker, for the invention of "Improvements in veneering presses."

On his petition, recorded in the Office of the Commissioners on the 21st day of September, 1861.

3042. To Robert Kennedy and James Armstrong, both of Lisburn, in the kingdom of Ireland, for the invention of "An improved arrangement of driving gear."

On their petition, recorded in the Office of the Commissioners on the 4th day of December, 1861.

3047. To Allen Thomas Carr, of Carlisle Street, Soho, in the county of Middlesex, Gentleman, for the invention of "The addition to horses' shoes of certain material to prevent slipping."

3050. And to John Wilson, of Glasgow, in the county of Lanark, North Britain, Picture Frame Maker, for the invention of "Improvements in frames used for displaying trade show cards, pictures, or other similar devices."

On both their petitions, recorded in the Office of the Commissioners on the 5th day of December, 1861.

3056. To Edgar Darius Seely, T[illegible]as Foster Wells [illegible] George [illegible]all

Crow[illegible]

3109. And to JOHN POTTER, of Leeds, in the county of York, a partner in the firm of Henry Joseph Morton and Co., of the same place, Wire Fencing Manufacturers, for the invention of "An improved mode of jointing or connecting telegraph wires, which is also applicable to jointing or connecting signal wires, fencing wires, and other wires or rods."

On their several petitions, recorded in the Office of the Commissioners on the 11th day of December, 1861.

3111. To RICHARD SEARLE, of Woodford Wells, in the county of Essex, Gentleman, for the invention of "Improvements in the treatment, preparation, and combination of metals used for sheathing ships and marine erections, also for roofing buildings and other purposes."

3114. To WILLIAM WIGGINS GODFREY, of 52, Whiskin Street, Clerkenwell, in the county of Middlesex, Gold Chain Manufacturer, and Goldsmith, for the invention of "An improved fastener or protector for Albert guards."

3115. To WILLIAM EDWARD WILEY, of No. 34 Great Hampton Street, Birmingham, in the county of Warwick, Gold Pen and Pencil Case Manufacturer, for the invention of "An improvement or improvements in pencil cases and holders for crayons and other solid writing or marking materials, which improvement or improvements may also be applied to crochet needle holders."

3116. To ROBERT MUSHET, of Coleford, in the county of Gloucester, Metallurgist, for the invention of "An improvement or improvements in the manufacture of iron and puddled steel."

3117. To WILLIAM SMITH LONGRIDGE, of Alderwasley Iron Works, in the county of Derby, Engineer, for the invention of "Improvements in

3124. To WILLIAM BELL, of the firm of Sidney, Flavel, and Co., of Leamington, in the county of Warwick, Manufacturers, for the invention of "Improvements in kitcheners or cooking ranges."

3125. To FREDERICK BRAMPTON, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "An improvement or improvements in the manufacture of the middle joints of measuring rules."

3126. To HENRY JOHN OLDING, of Smith Square, Westminster, in the county of Middlesex, Engineer, for the invention of "Improvements in the mode of, and apparatus for, feeding steam-boilers, also in apparatus for supplying fluids, for other purposes, and in apparatus for raising fluids."

3127. To EDUARD CLAUDE BARBOTTE DE BEAULIEU, of Avallon, in the department of Yonne, in the empire of France, for the invention of "Improvements in the manufacture of spirituous liquors, and in apparatus employed therein."

[illegible] To GREGORY BIRD, of Glasgow, in the county of Lanark, North Britain, Manufacturing Chemist, for the invention of "An improved grease for lubricating frictional surfaces."

313[illegible] THOMAS WALKER, of Birmingham, in the county of Warwick, Engineer, for the invention of "Improvements in means or apparatus for indicating the speed of vessels, and for taking soundings."

3135. To ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the [illegible] of "An improved arrangement of fire [illegible] communication to him from abroad by [illegible]utc, of Flushing, in the county of [illegible]tate of New York, United States of

[illegible]ETHERINGTON, of Manchester, in [illegible]neaster, Machine Maker, THOMAS [illegible]rood Manor, Uttoxeter, in the [illegible]quire, and JAMES CRAIG, [illegible] of Stafford, Cotton [illegible]mprovements in [illegible]d doubling

blowers or apparatuses for superheating steam and other gases, and for projecting them combined with atmospheric air upon ignited combustible matter." —A communication to him from abroad by Felix Alexandre Testud de Beauregard, of Paris, France.

On their several petitions, recorded in the Office of the Commissioners on the 13*th day of December,* 1861.

3143. To JACQUES EDOUARD DUYCK, of Tutsham Mills, West Farleigh, in the county of Kent, Gentleman, for the invention of "Improvements in the expression of oil from cake and seeds, and in apparatuses employed therein."

3146. To WILLIAM RODRIGUES ROGERS, of Gray's Inn Road, in the county of Middlesex, Builder, for the invention of "An improved mode of constructing dovetail joints."

3147. To WILLIAM ELLIOTT DEBENHAM, of The Terrace, Kensington Gardens Square, in the county of Middlesex, for the invention of "An improved plate holder for photographic purp[illegible]"

3148. To WILLIAM HUSBAND, of Hayle, [illegible] county of Cornwall, for the invention [illegible] improved water safety valve."

3149. And to JOHN HENRY JOHNSON, o[illegible]o. 47, Lincoln's Inn Fields, in the county of M[illegible]lesex, and of No. 166, Buchanan Street, in the [illegible]ity of Glasgow, North Britain, Gentleman, for the invention of "Improvements in railway rolling stock."—A communication to him from abroad by Thomas Jefferson Thompson, of Logrono, in the kingdom of Spain, Civil and [illegible] Engineer.

On their several petitions, recorded [illegible] *Commissioners on the* 14*th day of* [illegible]861.

3151. To JOHN WILLIS, junior [illegible] Tyne, in the county of Northu[illegible] the invention of "Improvemc[illegible] of materials applicable to t[illegible] paper."

3153. To GEORGE [illegible] Lincoln's In[illegible] and N[illegible] C[illegible]

3161. To JOHN BICKERTON BUNNEY, of Birmingham, in the county of Warwick, Electro-plater, and THOMAS WRIGHT, of Birmingham aforesaid, Electro-plater, for the invention of "Improvements in ornamenting metallic and non-metallic bedsteads and other articles made principally of metallic rods or tubes."

3162. To ROBERT SHAW, of Marple, in the county of Chester, Mechanic, for the invention of "Certain improvements in carding engines."

3164. And to ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the invention of "Improved hoisting apparatus."—A communication to him from abroad by John James Doyle and James Christison, both of the city of New York, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 17*th day of December,* 1861.

3166. To ROBERT SCOTT, of 29, Great Portland Street, in the county of Middlesex, Gun Maker, for the invention of "An improved method of rifling or grooving the barrels of fire-arms and ordnance."

3168. To JAMES PERRIN, of Hyde, in the county of Chester, Engineer, for the invention of "An improved equilibrium valve."

3170. To WILLIAM DICEY, of Waltham Abbey, in the county of Essex, for an invention of "Improvements in submarine electric telegraphic cables."

3172. To MORRIS HANFF, of Tottenham Street, Tottenham Court Road, in the county of Middlesex, Fancy Box Maker, for the invention of "Improvements in the manufacture of boxes and cases."

3174. T[illegible] THIÉRA[illegible] End, in the [illegible] Im-

Invention protected for Six Months by the Deposit of a Complete Specification.

NOTICE is hereby given that the petition of

3251. MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent Agent, praying for Letters Patent for the invention of "Improvements in fire arms, and in adapting bayonets or cutting or piercing weapons thereto,"—a communication to him from abroad by Mathieu Louis Michel Descoutures, of 33, Boulevart Saint Martin, Paris, France—was deposited and recorded in the Office of the Commissioners on the 28th day of December, 1861, and a complete specification acompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of LETTERS PATENT which passed the Great Seal on the

3rd January, 1862.

1720. HERMANN SCHUTT, of Bradford, in the county of York, Yarn Merchant, for an invention of "Improvements in spinning frames for spinning wool, cotton, silk, or flax, and other fibrous material."—A communication to him from abroad by William and Theodor Schmidt, of Altenburg, Saxony."—Dated 6th July, 1861.

1723. JAME[illegible]DALE, of No. 41, Stoke Newington[illegible]

1740. JOHN KEATS and GEORGE EDWARD KEATS, both of Leek, in the county of Stafford, Bootmakers, for an invention of "Improvements in sewing machinery."—Dated 9th July, 1861.

1750. JAMES FARRON, of Ashton-under-Lyne, in the county of Lancaster, Engineer, for an invention of "Improvements in apparatus and fittings connected with steam engines and boilers."—Dated 11th July, 18[illegible]

1754. THOMAS GOODE MESSENGER, of High Street, Loughborough, in the county of Leicester, Horticultural Builder and Plumber, for an invention of "Improvements in the construction of valves."—Dated 11th July, 1861.

1784. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in stage scenery and apparatus."—A communication to him from abroad by Mr. Théophile Foucault, of 29, Boulevart St. Martin, Paris, in the empire of France, Manufacturer. — Dated 15th July, 1[illegible]

[illegible]OSEPH LEWIS, of Rathmines, in the county [illegible]lin, Lithographic Printer, for an invention of "I[illegible]ements in producing and treating printing sur[illegible]s, in producing and preparing transferring sur[illegible]es, in transferring, in producing impressions on an altered scale, in preparing or treating surfaces of lithographic stones, and in obtaining devices or designs; also in agents and apparatus used in some of such improvements; parts of the invention being also applicable to photography, and to ornamenting pottery, porcelain, and glass." [illegible]ted 3rd August, 1861.

2768. [illegible]ORTON, of Sheffield, in the county of Yo[illegible] Maker, for an invention of "An [illegible]uction of skate." — Dated 4th

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[illegible]uty of £50

[illegible] Pro-

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

(*1st January*, 1862.)

73. EDWARD HALL, of Dartford, in the county of Kent, Engineer, for an invention of "Improvements in the manufacture of gunpowder."—Dated 11th January, 1855.

FOREIGN and COLONIAL PATENT LAWS and RULES, being translations or copies of Official Communications, may be found in the following Numbers of this Journal, published at each, or 3*d*. free by post:—

Austria, No. 291.
Bavaria, No. 262.
Belgium, Nos. 292 and 348.
Baden, and Petty States of Germany, [illegible].
British Guiana, No. 798.
Canada, Nos. 279 and 625.
Cape of Good Hope, No. 727.
Ceylon, No. 64[illegible].
Cuba, No. 498.
Dutch West Indies, No. 322.
France, No. 228.
Greece, No. 325.
Germany, No. 435.
Hanover, No. 231.
India, Nos. 240, 348, and 552
Jamaica, No. 660.
Mexico, No. 496.
Netherlands, No. 289.
New South Wales, [illegible]
Norway, No. [illegible]
Prussi[illegible]

SUPPLEMENT to the SERIES of LETTERS PATENT and SPECIFICATIONS of LETTERS PATENT for INVENTIONS recorded in the Great Seal Patent Office, and granted between the 1st March (14 Jac. I.) A.D. 1617, and the 1st October (16 Vict.) A.D. 1852; consisting for the most part of Reprints of scarce Pamphlets, descriptive of the early patented Inventions comprised in that Series. Edited by BENNET WOODCROFT, F.R.S., Superintendent of Specifications, etc. In one vol., price 9*s*. 6*d*., or each Tract separately at the price affixed.

CONTENTS OF VOL. I.

1. Metallica; or, the Treatise of Metallica, briefly comprehending the doctrine of diverse new metallical inventions, &c. By SIMON STURTEVANT. (*Letters Patent, dated 29th February*, 1611.) Price 1*s*. 4*d*.
2. A Treatise of Metallica, but not that which was published by Mr. Simon Sturtevant, upon his Patent, &c. By JOHN ROVINSON. (*Letters Patent, granted A.D.* 1612.) Price 4*d*
3. A Commission directed to Sir Richard Wynne and others to inquire upon oath whether NICHOLAS PAGE or Sir NICHOLAS HALSE was the first inventor of certaine kilnes for the drying of malt, &c. &c. (*Letters Patent, Nos.* 33 *and* 85, *respectively dated 8th April*, '626, *and 23rd July*, 1635.) Price 2*d*.
4. DUD DUDLEY'S Metallum Martis; or iron made with pit-coale, sea-coale, &c. (*Letters Patent, Nos.* 18 *and* 117, *respectively dated 22nd February*, 1620 *and 2nd May*, 1658.) Price 8*d*.
5. Description of the nature and working of the patent Water-scoop Wheels invented by WILLIAM WHELER, as compared with the raising wheels now in common use. By J. W. B. Translated from the Dutch by Dr. Tolhausen. (*Letters Patent, No.* 127, *dated 24th June*, 1642.) Price 2*s*.
6. An exact and true definition of the stupendous Water-commanding Engine, invented by the Right Honourable (and deservedly to be praised and admired) EDWARD SOMERSET, Lord Marquis of WORCESTER, &c. &c. (*Stat. 15 Car. II. c.* 12. *A.D.* 1663.) Price 4*d*.
7. Navigation Improved; or the art of rowing ships of all rates in calms, with a more easy, swift, and steady motion than oars can. By THOMAS SAVERY. (*Letters Patent, No.* 347, *dated 10th January*, 1696.) Price 1*s*.
8. The Miner's Friend; or an engine [illegible] water by fire [illegible] By THOMA[illegible] *Patent*, [illegible]*III*.

THE CHRONOLOGICAL INDEX of APPLICATIONS for PATENTS and PATENTS GRANTED from the 1st January to the 31st December, 1859. Price 6*s.* 6*d.*

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PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s.*

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ABRIDGMENTS (in Classes, and Chronologically arranged) of all SPECIFICATIONS of PATENTED INVENTIONS, from the earliest enrolled to those published under the Act of 1852.

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[illegible] in the press:—

[illegible]&c.

[illegible]FUEL, AND APPARATUS FOR ITS COM-

[illegible]WOODCROFT.

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UNIVERSITY OF ILLINOIS

THE

COMMISSIONERS OF PATENTS' JOURNAL.

By Authority.

(Registered for transmission abroad.)

No. 836. TUESDAY, JANUARY 7, 1862. Price 2d.

Applications for Letters Patent.

(*3rd, 4th, and 6th January*, 1862.)

24. Edward Nugent, of Brooklyn, in the county of Kings and state of New York, United States of America, for an invention of "Improvements in fire-arms."—Dated 3rd January, 1862.

25. Gilbert Stracey, of Rackheath Hall, near Norwich, in the county of Norfolk, for an invention of "Improvement in the manufacture of artificial fuel (fuel)."—Dated 3rd January, 1862.

26. Francois Sebastien Belloche and Herman Bollack, of the firm of Bollack, Brothers, of 333, Rue St. Martin, Paris, in the empire of France, and of 42, Bridge Street, Blackfriars, London, for an invention of "An improved parasol."—Dated 3rd January, 1862.

27. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "Improvements in apparatus for dressing, cleaning, or sifting grain."—A communication to him from abroad by Louis Appolinaire Haton, of No. 15, Passage des Petites Ecuries, Paris, in the empire of France, Merchant. —Dated 3rd January, 1862.

28. James Whitton Arundell, of No. 265, Gresham House, Old Broad Street, in the city of London, Gentleman, for an invention of "An improved method and improved apparatus for treating and dressing ores and minerals, particularly applicable to tin, lead, copper, zinc, and iron ores."—A communication to him from abroad by Mr. Martin Neuerburg, residing at Kalk, Rhenish Prussia.—Dated 4th January, 1862.

29. James Whitton Arundell, of No. 265, Gresham House, Old Broad Street, in the city of London, Gentleman, for an invention of "An improved method and improved apparatus for removing impurities from coal, parts of which invention are applicable for the separation and cleansing of ores and other minerals."—A communication to him from abroad by Mr. Martin Neuerburg, residing at Kalk, Rhenish Prussia.—Dated 4th January, 1862.

30. James Whitton Arundell, of No. 265, Gresham House, Old Broad Street, in the city of London, Gentleman, for an invention of "An improved method of communicating motion to fan ventilators, particularly applicable to ventilating mines."—A communication to him from abroad by Mr. Martin Neuerburg, residing at Kalk, Rhenish, Prussia.—Dated 4th January, 1862.

31. Christopher Cross, of Stratford, near Manchester, and Edward Padmore, of the city of Manchester, in the county of Lancaster, for an invention of "Improvements in the manufacture of piled fabrics and in machinery or apparatus employed therein."—Dated 4th January, 1862.

32. Richard Henry Cotter, of Cambridge Heath, in the county of Middlesex, for an invention of "An improved apparatus for suddenly producing a permanent light." — Dated 4th January, 1862.

33. George Leyshon, of Tividale, in the county of Stafford, Tinplate Assorter, and David Beckley, of Brockmoor, in the county of Stafford, Grocer, for an invention of "An improvement or improvements in breaks for retarding and stopping carriages on railways."—Dated 4th January, 1862.

34. James Howden, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in steam engines and boilers."—Dated 4th January, 1862.

35. Henry Davis Pochin, of Salford, in the county of Lancaster, Manufacturing Chemist, for an invention of "An improved soap or size."—Dated 4th January, 1862.

36. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Certain new and useful improvements in machinery for propelling water craft." — A communication to him from abroad by Edward Sabine Renwick, a person resident at 335, Broadway, New York, in the United States of America. — Complete specification. — Dated 4th January, 1862.

37. Arthur Warner, of No. 31, Threadneedle Street, in the city of London, Merchant, for an invention of "Improvements in preparing materials for and in purifying coal gas." — Dated 4th January, 1862.

38. John Coryton, of Rolls Chambers, 89, Chancery Lane, W. C., Barrister at Law, for an invention of "An improved type machine."—Dated 6th January, 1862.

39. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "An improved manufacture of cigars."—A communication to him from abroad by William Chevers Kneeland, of New York, in the United States of America.—Dated 6th January, 1862.

40. George Betjemann, George William Betjemann, and John Betjemann, of Pentonville, in the county of Middlesex, Desk and Dressing Case Manufacturers, for an invention of "Improvements in dressing cases, applicable to other cases and boxes." — Dated 6th January, 1862.

41. Patrick Benignus O'Neill, of Hart Street, Bloomsbury, in the county of Middlesex, for an invention of "Improvements in screw wrenches or spanners."—Dated 6th January, 1862.

42. William Thomas Kite, of Mongewell Mill, Wallingford, in the county of Berks, for an invention of "Improvements in the manufacture of starch, and in apparatus employed therein."—Dated 6th January, 1862.

43. Frederick Brown, of the firm of Brown and Green, Ironfounders and Ironmongers, of Luton, in the county of Bedford, for an invention of "Improvements in kitchen ranges and cooking apparatus."—Dated 6th January, 1862.

Notices to Proceed.

Notice is hereby given, that

2108. Samuel Elson, of Oldham, in the county of Lancaster, Engineer, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in apparatus for heating the feed water of steam boilers, superheating steam, and surface condensation."

As set forth in his petition, recorded in the said office on the 23rd day of August, 1861.

2120. And Robert Watkin Jones, of Glenbrook Baths and Hotel, in the county of Cork, has given the like notice in respect of the invention of "Improvements in heating and ventilating, especially applicable to Turkish baths."

2123. And George Nye, of No. 18, Mount Street, Lambeth, in the county of Surrey, Surgical Instrument Maker, has given the like notice in respect of the invention of "Improvements in apparatus for administering injection in a continuous stream, also applicable as an eye douche, and other purposes."

2124. And Auguste Lechêne, of No. 9, Stanhope Street, Hampstead Road, in the county of Middlesex, and Charles Nathan, of 17, Westmoreland Street, Pimlico, in the same county, have given the like notice in respect of the invention of "Improvements in the manufacture of ladies' collars, cuffs, or other ornamental articles for dress or furniture, to imitate such articles made of lace or embroidery."

2125. And John Lyon Field, of Colton Haverthwaite, near Newton in Cartmel, Lancashire, has given the like notice in respect of the invention of "Improvements in the construction of armour plates, and in their application to ships and batteries."

2126. And Frederick Tolhausen, Civil Engineer and Patent Agent, of No. 35, Boulevart Bonne Nouvelle, Paris, in the empire of France, has given the like notice in respect of the invention of "A new kind of artificial fur, to be made by means of the jacquard or other loom, with silk or other textile material."—A communication from Antoine Denis and Adolphe Mottet, two persons resident at No. 35, Boulevart Bonne Nouvelle, Paris, France.

2130. And Henry Attwood, of Wapping Wall, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in cleansing and in feeding boilers."

As set forth in their respective petitions, all recorded in the said office on the 26th day of August, 1861.

2135. And John Christopher Cæsar Azémar, of 40, Mark Lane, in the city of London, has given the like notice in respect of the invention of "The manufacture of an instrument to facilitate the practice of the drum."

2139. And John Matthias Hart, of 76, Cheapside, in the city of London, and Robert Lavender, of 2, Acacia Cottages, New Road, Hornsey, both in the county of Middlesex, have given the like notice in respect of the invention of "Improvements in handles or knobs of locks and latches, and in the means of applying them."

As set forth in their respective petitions, both recorded in the said office on the 27th day of August, 1861.

2140. And Arthur Granger, of Holborn, in the county of Middlesex, Stationer, has given the like notice in respect of the invention of "Improvements in the manufacture of shirt collars and fronts, wristbands, or cuffs, neckties, or other similar articles of wearing apparel."

2142. And Benjamin Browne, of No 52, King William Street, in the city of London, Civil Engineer and Patent Agent, has given the like notice in respect of the invention of "An improved process and apparatus for concentrating ores or tailings, or separating pulverized mineral substances of different kinds or qualities from each other."—A communication to him from abroad by Henry Eberhard Roeder, of No. 363, Broadway, New York, in the United States of America, Engineer.

As set forth in their respective petitions, both recorded in the said office on the 28th day of August, 1861.

2151. And Victor Alexandre Janvier, of Wilton Square, New North Road, in the county of Middlesex, Die Sinker, has given the like notice in respect of the invention of "Improvements in fastenings for gloves, belts, and other articles."

2153. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "Improved machinery for cleaning rice and other grain."—A communication to him from abroad by Albert Hubbell Wright, of New York, in the United States of America.

As set forth in their respective petitions, both recorded in the said office on the 29th day of August, 1861.

2155. And Lemuel Dow Owen, of 481, New OxfordStreet, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in ploughs."—A communication to him from abroad by Martin Buck, of Lebanon, New Hampshire, United States, Engineer.

2159. And Alexandre Jaille, of Agen, in the Department of the Lot et Garonne, in the empire of France, Merchant, has given the like notice in respect of the invention of "An improved manufacture of manure."

2161. And Henry William Spencer, of Stepney Causeway, Commercial Road, county of Middlesex, Oil Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of animal oils, the said improvements relating more particularly to the processes of refining them to be used for lubricating purposes."

2164. And Hippolyte Lecaudey, residing usually at Paris, in the empire of France, but now of No. 11, Wellington Street, Strand, in the county of Middlesex, Merchant, has given the like notice in respect of the invention of "Improved apparatus for succouring persons interred before life is extinct."—A communication to him from Raymond Maleville, a person resident at Bordeaux, in the empire of France, Merchant.

As set forth in their respective petitions, all recorded in the said office on the 30th day of August, 1861.

2172. And Thomas Moreton Jones, of Great Pultency Street, in the county of Middlesex, Mechanician, has given the like notice in respect of the invention of "Improvements in apparatus for suspending and turning meat, fowls, and such like articles for roasting."

2174. And Charles Pemberton, of Deptford, in the county of Kent, Engineer, has given the like notice in respect of the invention of "Improvements in railway, ship, and other signals."

2177. And John Jones, of 55, North John Street Liverpool, in the county of Lancaster, Tailor and Draper, has given the like notice in respect of the invention of "Improvements in clasps or fastenings for garments, belts, harness, and like articles."

2179. And John Macmillan Dunlop, of Manchester, Engineer, has given the like notice in respect of the invention of "Improvements in cleansing cotton seeds, and in machinery used for such process."

As set forth in their respective petitions, all recorded in the said office on the 31st day of August, 1861.

2187. And Joseph Hall, of Oldham, in the county of Lancaster, Engineer, has given the like notice in respect of the invention of "Improvements in portable pumps or engines for extinguishing fires and other purposes."

2188. And John Watson, of Glasgow, in the county of Lanark, North Britain, Engineer, has given the like notice in respect of the invention of "Improvements in furnaces."

2189. And Emile Alcan, of Coleman Street Buildings, in the city of London, Merchant, has given the like notice in respect of the invention of "Improvements in machinery for carding and combing wool and other filamentous substances."—A communication to him from abroad by Celestin Martin of Forge Thiry lez Verviers, Belgium.

As set forth in their respective petitions, all recorded in the said office on the 2nd day of September, 1861.

2195. And Edmund Suckow and Edward Habel, of Oldham, in the county of Lancaster, Engineers, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for producing a strong blast or current of air."

As set forth in their petition, recorded in the said office on the 3rd day of September, 1861.

2201. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in self-acting brakes applicable to railway or locomotive engines and carriages."—A communication to him from abroad by Léon Isidore Molinos, of No. 45, Rue St. Sébastien, Paris, Engineer.

As set forth in his petition, recorded in the said office on the 4th day of September, 1861.

2211. And Peter Effertz, of the city of Manchester, in the county of Lancaster, Engineer, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for making bricks, tiles, drain-pipes, and other similar articles."

2213. And Frederick Bennett, of Upper Works, Bagillt, in the county of Flint, Manager, has given the like notice in respect of the invention of "An

improved method of coating the interior surface of lead and lead composition pipes with tin or its alloys."

As set forth in their respective petitions, both recorded in the said office on the 5th day of September, 1861.

2234. And Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for signalling on railways by means of electricity."—A communication to him from abroad by Eugene Vincenzi, of Parma, in Italy, Lieutenant of Artillery.

As set forth in his petition, recorded in the said office on the 6th day of September, 1861.

2240. And George Norris, of Brondesbury Terrace, Kilburn, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in the manufacture of soap."

2244. And George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, has given the like notice in respect of the invention of "Improvements in the construction of saddles."—A communication to him from abroad by Mr. Louis Friese, of Stuttgard, in the kingdom of Wurtemburg.

As set forth in their respective petitions, both recorded in the said office on the 7th day of September, 1861.

2267. And Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "An improved combination of machinery for the production of Valenciennes, Chantilly, Brussels, and other similar laces."—A communication from Jean François Régis-Laporte, a person resident at No. 3, Rue Saint Fiacre, Paris.

As set forth in his petition, recorded in the said office on the 12th day of September, 1861.

2284. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in guns."—A communication to him from abroad by William McCord, of New York, in the United States of America.

As set forth in his petition, recorded in the said office on the 13th day of September, 1861.

2332. And John Gurman, of Onslow Road, Southampton, in the county of Hants, Builder, has given the like notice in respect of the invention of "Improvements in the fittings and method of hanging window sashes, to facilitate their removal for cleaning and other purposes."

As set forth in his petition, recorded in the said office on the 18th day of September, 1861.

2421. And Georges Joseph Ganier and Emile Eugéne Collet, of No. 12, Place de la Bourse, in the city of Paris, and empire of France, Advertisement Agents, have given the like notice in respect of the invention of "Improvements in envelopes."

As set forth in their petition, recorded in the said office on the 27th day of September, 1861.

2464. And William Thomas Henley, of St. John Street Road, Clerkenwell, in the county of Middlesex, Telegraph Engineer, has given the like notice in respect of the invention of "Improvements in magnetic and electric telegraph apparatus, which are also applicable to other purposes."

As set forth in his petition, recorded in the said office on the 3rd day of October, 1861.

2576. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "Improvements in the construction of grain and grass harvesters." — A communication to him from abroad by Edwin Perry Russell and Porter Tremain, of Manlius, Onondaga County, State of New York, United States of America.

As set forth in his petition, recorded in the said office on the 16th day of October, 1861.

2607. And James Webster, of Birmingham, in the county of Warwick, Engineer, has given the like notice in respect of the invention of "Improvements in manufacturing oxygen gas, and obtaining certain other products."

As set forth in his petition, recorded in the said office on the 19th day of October, 1861.

2665. And John McCall, of Houndsditch, in the city of London, Provision Merchant, and Bevan George Sloper, of Walthamstow, in the county of Essex, Chemist, have given the like notice in respect of the invention of "An improvement in the preservation of articles of food."

As set forth in their petition, recorded in the said office on the 24th day of October, 1861.

2776. And Charles Frederick Hayes, of the Royal Small Arms Factory, Enfield, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in means or apparatus for generating steam."

2778. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in steam generators, and in furnaces for the same."—A communication to him from abroad by Alexandre Friedmann and Frederic Emile de Erlanger, both of Paris, France.

As set forth in their respective petitions, both recorded in the said office on the 5th day of November, 1861.

2920. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in the treatment of zinc ores, and in the apparatus employed therein, which improvements are also appli-

cable to the manufacture of phosphorus."—A communication to him from abroad by Adrien Muller, of Paris, in the empire of France, Engineer.

As set forth in his petition, recorded in the said office on the 20th day of November, 1861.

2973. And George Bottomley, of St. George's Place, Leeds, in the county of York, Gentleman, has given the like notice in respect of the invention of "Improved machinery for cutting up linen, cotton, woollen, and other rags, fibrous waste, or vegetable substances, for various purposes in the industrial arts."

As set forth in his petition, recorded in the said office on the 26th day of November, 1861.

3043. And William Henry Balmain, of Saint Helen's, in the county of Lancaster, Manufacturing Chemist, has given the like notice in respect of the invention of "Improvements in the manufacture of potash and salts of potash."

As set forth in his petition, recorded in the said office on the 4th day of December, 1861.

3052. And James Cochrane, of Harburn, in the county of Mid Lothian, Gentleman, has given the like notice in respect of the invention of "Improvements in wet gas meters."

As set forth in his petition, recorded in the said office on the 5th day of December, 1861.

3098. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in knapsacks."—A communication to him from abroad by Joseph Short, of the city of Boston, in the United States of America.

As set forth in his petition, recorded in the said office on the 10th day of December, 1861.

3124. And William Bell, of the firm of Sidney Flavel and Company, of Leamington, in the county of Warwick, Manufacturers, has given the like notice in respect of the invention of "Improvements in kitcheners or cooking ranges."

3127. And Eduard Claude Barbotte de Beaulieu, of Avallon, in the department of Yonne, in the empire of France, has given the like notice in respect of the invention of "Improvements in the manufacture of spirituous liquors, and in apparatus employed therein."

As set forth in their respective petitions, both recorded in the said office on the 13th day of December, 1861.

3143. And Jacques Edouard Duyck, of Tutsham Mills, West Farleigh, in the county of Kent, Gentleman, has given the like notice in respect of the invention of "Improvements in the expression of oil from cake and seeds, and in apparatuses employed therein."

As set forth in his petition, recorded in the said office on the 14th day of December, 1861.

3153. And George Davies, of No. 1, Serle's Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in the manufacture of textile materials."—A communication to him from abroad by Aloïs Chevalier Auer de Welsbach, Aulic Councillor and Director of the Imperial Printing Office, Vienna.

As set forth in his petition, recorded in the said office on the 16th day of December, 1861.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

7th January, 1862.

1733. Thomas Telford Macneill, of 23, Cockspur Street, in the county of Middlesex, for an invention of "Improvements in the construction of barometers, and in apparatus for registering the indications of the same."—Dated 9th July, 1861.

1739. William Coulson Parkinson, of Cottage Lane, City Road, London, Gas Meter Manufacturer, for an invention of "An improved frictionless bearing for gas meters."—Dated 9th July, 1861.

1751. Joseph Rogerson Cotter, of Donoughmore Rectory, in the county of Cork, Ireland, Clerk, for an invention of "Certain improvements in the pianoforte."—Dated 11th July, 1861.

1755. Henry Ashwell, of New Basford, in the county of Nottingham, Bleacher, for an invention of "Improvements in apparatus for washing, cleansing, scouring, getting up, dyeing, boiling, and steaming."—Dated 11th July, 1861.

1758. John Adams, of King William Street, in the city of London, Gun Manufacturer, for an invention of "Improvements in revolving fire-arms, and in cartridges for the same."—Dated 12th July, 1861.

1766. Frederick Tolhausen, Civil Engineer and Patent Agent, of 35, Boulevart Bonne Nouvelle, Paris, in the empire of France, for an invention of "Improvements in looms for weaving ribbons and other fabrics." — A communication from Georges Duplay, Loom Maker, a person resident at No. 11, Rue Notre Dame, St. Etienne, in the empire of France.—Dated 13th July, 1861.

1783. Emile Georges Fermier de la Provotais, of 29, Boulevart St. Martin, Paris, for an invention of "Extracting the fibres from genista scoparia (broom) and their application to manufac

turing paper and fabrics, and also treating the washing waters so as to obtain dyeing products therefrom."—Dated 15th July, 1861.

1815. Robert Walker, of Eccleston, near Prescot, in the county of Lancaster, Engineer, for an invention of "An improved apparatus for stopping and packing bottles."—Dated 19th July, 1861.

1817. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "Improvements in the manufacture of cast steel."—Dated 19th July, 1861.

1853. John Sidebottom, of Harewood, near Mottram, in the county of Chester, Cotton Spinner and Manufacturer, for an invention of "Improvements in fire-arms and ordnance."—Dated 24th July, 1861.

1866. Marc Klotz, of 29, Boulevart St. Martin, Paris, in the empire of France, Merchant, for an invention of "A new application of certain products to ornamenting tissues, papers, and other surfaces."—Dated 25th July, 1861.

1875. Félicité Noëmi Thurel, of 2, Rue Sainte Appoline, Paris (France), and of 4, South Street, Finsbury, London, for an invention of "Improvements in the method of fastening shoes, stays, gloves, and other wearing apparel."—Dated 26th July, 1861.

2528. Thomas Peter Bennett, of the Gilnow Mills, near Bolton-le-Moors, in the county of Lancaster, Manager, and James Collier, of the same place, Mechanic, for an invention of "Certain improvements in or applicable to self-acting mules for spinning."—Dated 10th October, 1861.

2635. Herbert Frost, of the city of Manchester, Manager of the Manchester Water Meter Company, Limited, for an invention of "Improvements in apparatus for measuring fluids."—Dated 22nd October, 1861.

2723. Robert Walter Winfield, of Birmingham, in the county of Warwick, Merchant and Manufacturer, for an invention of "An improvement or improvements in the manufacture of pulley rods for curtains, commonly called French pulley rods."—Dated 30th October, 1861.

2724. Robert Walter Winfield, of Birmingham, in the county of Warwick, Merchant and Manufacturer, for an invention of "An improvement or improvements in ornamenting metallic bedsteads and other articles of metallic furniture."—Dated 30th October, 1861.

2878. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in steam engine governors."—A communication to him from abroad by Wellington Lee, of East Nineteenth Street, New York, in the United States of America.—Dated 15th November, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 4th January*, 1862, *inclusive.*)

2nd January.

39. James Howard, of Bedford, Agricultural Implement Maker, for an invention of "An improved construction of lever-neck plough."—Dated 5th January, 1859.

84. David Edward Hughes, of New York, but now residing at Northampton Square, in the county of Middlesex, Telegraphic Engineer, for an invention of "An improved mode of insulating electrical conducting wires."—Dated 11th January, 1859.

153. Richard Garrett, junior, of Leiston Works, Saxmundham, in the county of Suffolk, and James Kerridge, Foreman to Messrs. Garrett and Sons, of Leiston Works aforesaid, for an invention of "An improved arrangement of combined thrashing and dressing machine."—Dated 18th January, 1859.

3rd January.

52. Isaac Holden, of St. Denis, near Paris, in the empire of France, and Angus Holden, of Bradford, in the county of York, for an invention of "Improvements in means or apparatus employed in preparing and combing wool and other fibres."—Dated 7th January, 1859.

4th January.

37. Frederick Clark, of King Street, Bloomsbury, in the county of Middlesex, Turner, for an invention of "Improvements in connecting knobs and handles to the spindles of locks and latches, and other articles of a like nature."—Dated 5th January, 1859.

42. William Corfield, the younger, of Charlton-Adam, in the county of Somerset, for an invention of "Improvements in chains for coupling cranes, cables, mining purposes, hoisting, and all other purposes where chains are used."—Dated 5th January, 1859.

50. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for boring or piercing rocks, applicable also to the dressing or working of stone, and as a power hammer generally."—A communication from Monsieur Germain Sommeiller, residing at Turin, in the kingdom of Sardinia, Engineer.—Dated 6th January, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

(*3rd January*, 1862.)

25. George Walker Muir, of Glasgow, in the county of Lanark, Scotland, for an invention of "Improvements in warming and ventilating."—Dated 3rd January, 1855.

Erratum in Journal of 31st December, 1861.

2117. For "nuts" read "huts."

FOREIGN PATENTS.



UNITED STATES OF AMERICA.

(Communicated by the Commissioner of Patents.)

List of Patents, with claims annexed, issued from the United States Patent Office, for the week ending 3rd December, 1861, and each bearing that date.

No. 2814. David Bissel, of Detroit, Mich., for an "Improvement in machines for turning boot legs."

"I claim the racks B and C, cylinder H, G, G, ring J, and catcher F, when arranged and combined with the frame A and pinion D, and constructed to operate as herein described and for the purposes set forth."

No. 2815. John Adams Bolton, of Leicester, England, for an "Improvement in hot-air furnaces."—Patented in England 19th March, 1861.

"I claim, 1st, the arrangement of the flue conveying the outer air to the heating chamber by bifurcating it at or about the said fire chamber, and by so continuing each branch flue as to follow up both sides of the firehole and ash-pit, and then re-unite in the heating chamber whence the heated air is delivered to a hot-air chamber, and from there delivered to the apartments as herein shown and described. 2nd, forming the heating chamber and hot-air chamber in one compartment by the use of a divisional plate provided with a bottom plate so that the air shall be gradually heated in the former and caused to come in contact with the fire plate previous to its entering the hot-air chamber, as described and shown."

No. 2816. C. C. Bradley, of Brodhead, Wis., for an "Improvement in double trees."

"I claim the construction of a double tree, which dispenses entirely with single trees, and the application of the central pulley as a substitute therefor; also the method herein described of attaching the trace hooks to a movable slide with the slot therein, or substantially the same."

No. 2817. John Broughton, of New York, N.Y., for an "Improved cut-off valve for steam engines."

"I claim, 1st, regulating the velocity of a steam engine by combining the regulator with a positively operating valve gear when such regulator determines the lead of the valve, and the lead of the valve is made to determine the point in the stroke of the piston at which the steam is cut off. 2nd, in combination with a lifter K, having a certain movement in relation to the main valves, I claim the sliding bevel faced toes Q, Q^1, inclined tappets a, a^1, and rods I, I^1, or their equivalents, operating substantially in the manner explained to impart a positive movement to the cut-off valves G, G^1."

No. 2818. James C. Brown, of Fond du Lac, Wis., for an "Improvement in machines for sawing shingle bolts."

"I claim the use of the adjustable revolving table, or its equivalent, substantially as described, for sawing the blocks on end, whereby they may be divided into suitable bolts for shingles, as specified."

No. 2819. William D. Bush, of Fall River, Mass., for an "Improved row lock."

"I claim recess F^3 and pin a^3, the spirally rifled socket G^4, constructed and operating as and for the purpose set forth."

No. 2820. Charles W. Cahoon, of Portland Maine, for an "Improvement in lamps."

"I claim in combination with a lever and chimney fastenings, an adjustable fulcrum substantially as described. I also claim in combination with a lever and chimney fastenings the indentations F, F, for the purpose of preventing the the chimney from going too far back, substantially as described."

No. 2821. Charles W. Cahoon, of Portland, Maine, for an "Improvement in lamps."

"I claim, first, a lever with chimney fastenings, having that part of it on which the chimney rests extended, so as to form a deflector substantially as described. 2nd, I claim the combination of the lever A with the air chamber D, when the air chamber is attached to the lever and is movable with it substantially as described. 3rd, I claim in combination with a lever for raising the chimney, the air chamber D, and screen E, arranged substantially as described. 4th, I claim the ring G, in combination with the lever A, substantially as described. 5th, I claim the bar H, having a stop I, in combination with the cap J, and lever A, substantially as described. 6th, I claim the handle L, in combination with the adjustable fulcrum K, and the lever A, substantially as described."

No. 2822. Richard Colvin, of Baltimore, Md., for an "Improvement in beehives."

"I claim the divisions or partitions placed between the spaces designed to be occupied by combs in beehives, for the purpose of insuring straight and uniform combs substantially as herein described, when either the partition or comb frames, or both, are made capable of independent lateral movement."

No. 2823. Theodore D. Davis, of Syracuse, N.Y., for an "Improvement in mode of attaching carriage shafts."

"I claim a wrought or malleable shaft heel and arm, constructed so as to secure and tighten the shafts and cross bar, substantially as shown and described."

No. 2824. G. C. Louis Degenhardt, of Fresckow, Pa., for an "Improved apparatus for purifying acid water for steam boilers."

"I claim the combination of apparatus substantially as herein described, to operate in the manner and for the purposes set forth."

No. 2825. Julius C. Dickey, of Saratoga Springs N.Y., for an "Improvement in machinery for crushing or pulverizing quartz."

"I claim, 1st, the employment of one or more of the hammers I, in the wheel B, for the purpose specified. 2nd, I claim the employment of the seive D, in the hollow shaft of section l of wheel B, for the purpose specified. 3d, I claim the arrangement and employment of the hopper E, for the purpose specified."

No. 2826. George H. Dodge, of Camden, N.J., for an "Improvement in hinges."

"I claim, 1stly, the link E, with its pins e and e^1, in combination with the boxes C and D, or their equivalents, and their elongated slots, for the reception of the said pins, the whole being constructed and applied to the lids or door of pianos, cabinets, &c., substantially as and for the purpose herein set forth. 2ndly, I claim the projections i and i, of the link E, when arranged in respect to the concave interior of the boxes C and D, and to the recesses j, j, of the said boxes, substantially as set forth."

No. 2827. Henry C. Felthousen, of Buffalo, N.Y., for an "Improvement in signal lanterns."

"I claim the arrangement of the movable and stationary vertical rods D and E, and the movable and stationary tubes G and H, and connecting piece F, with the colored glass and frame C, as a means of raising and lowering and supporting the colored glass for change of signals, substantially as described. I also claim the funnel J, made air tight at its apex and sides inverted and suspended over the top of the lamp chimney, in its arrangement with the cap L, and outside guard K, for the purposes and substantially as described."

No. 2828. John W. Foster, of Detroit, Mich., for an "Improved apparatus for steering vessels by water."

"I claim the combination of the stationary transverso tubes B, B¹, and rotary cylinder C, with a shaftless screw F fixed therein, and cogs G, upon its periphery employed in the manner herein-before explained for working and steering vessels."

No. 2829. Henry Frankfurth, of Utica, N.Y., for an "Improved baby jumper and supporter."

"I claim, 1st, the making of the baby walker and supporter, adjustable as to its height in order to suit the length of the child, or more or less to relieve its feet and limbs, as described. 2nd, the gate and gate way, as described, by means of which the child may be introduced or removed horizontally, as described."

No. 2830. Wilkinson Furnas, of Ononwa, Iowa, for an "Improvement in plows."

"I claim the arrangement of the pulley bars N, N, pulleys M, *o*, treadles P, levers J, J, cords *c*, *c*, bars F, F, and racks K, K, with the swinging and rising plow standards G, G, and the driver's seat Q, all as herein shown and described."

No. 2831. G. W. Gardner, of Troy, for an "Improvement in percussion shells."

"I claim so constructing percussion shells that the hammer, or its equivalent, may be held by the side of the cap, or inoperative, until discharged from the gun, and then be placed upon the cap by the use of the fuse plug, or its equivalent, and the combination of the cylinders and springs, substantially as herein set forth."

No. 2832. Henry Gross, of Tiffin, Ohio, for an "Improvement in revolving fire-arm."

"I claim the hammer E, when constructed as described, which on being raised or cocked, through the mechanism described, withdraws the cylinder from the breech of the barrel, intermittently revolves and releases it, and by means of its projecting part or cam F, firmly locks the cylinder to the barrel at the moment of firing as set forth."

No. 2833. T. C. Hargreaves, of Schenectady, N. Y., for an "Improvement in broom vice."

"I claim the arrangement herein described of the bed plate 1, with its side ribs 3, 3, cross plate 5, jaw 6, fingers 21, 23, folding jaw 25, and legs 9, the sliding plate 4, with its side ribs 7, cross plate 8, rack gear 11, ratchet rack 15, jaw 18, fingers 22, 24, folding jaw 26, the pinion lever 13, and the pawl 16, in combination with each other, substantially as set forth."

No. 2834. Aaron Higley, of Sand Creek, Min., for an "Improvement in grain separators."

"I claim, 1st, the arrangement of the hopper A, sieves *e*, *f*, *g*, *h*, *i*, *j*, imperforate plates *o*, *v*, and troughs A¹, B¹, W, X, with shoe B, the whole combined and operating in the manner and for the purpose described. 2nd, I claim the arrangement of the sieves in the shoe B, with the endless apron F, trunk G, fan I, sieves K, L, M, in the shoe J, and drawers E, O, R, the whole combined and operating in the manner and for the purpose described. 3rd, I claim the combination of the sliding gate or valve *a*, screw bolt *b*, and nut *c*, for regulating the size of the seed aperture in the hopper H, substantially as described."

No. 2835. Benjamin B. Hill, of Chicopee, Mass., for an "Improvement in shaft coupling."

"I claim the employment of a tapering, or conical bearing pin or bolt B, for the socket of the shaft iron having an adjustable set screw A, and set nut E, in the manner substantially as and for the purpose described."

No. 2836. John W. Hinman, of Omro, Wis., for an "Improvement in buckles."

"I claim a buckle constructed, combined, and operating substantially as described."

No. 2837. H. C. Hunt, of Amboy, Ill., for an "Improvement in car coupling."

"I claim the arrangement of the spring G, and hooked link F, with the curved oscillating hook B, vertically sliding catch C, vibrating arm *d*, and flaring draw-head A, the said parts being constructed and operating together in the manner herein shown and described."

No. 2838. P. Kane and W. Floyd, of South Perry, Ohio, for an "Improved burglar alarm."

"We claim the combination of the stud I, spring H, and case A, substantially as described, whereby the alarm can be readily applied to any ordinary door lock. We claim also the plunging trigger F, in combination with the devices above referred to; and with the alarm mechanism, constructed, arranged, and operating substantially in the manner and for the purpose set forth."

No. 2839. Mark Lounsbury, of Seymour, Conn., for an "Improvement in fruit gatherers."

"I claim the slide bar *g*, and links *f*, *f*, actuated by the cord *h*, in combination with the knives *e*, *e*, and receptacle or bag *d*, for the purposes and as set forth."

No. 2840. D. McDaniel, of New Castle, Co., and E. A. Harvey, of Wilmington, Del., for an "Improvement in removing acid from the surface of iron."

"We claim the improved process for removing acid from sheets and other articles of iron described, to wit, immersing the sheets or articles of iron under a vacuum or partial vacuum, or immersing and boiling under a vacuum or partial vacuum the sheets or articles of iron from which the acid is to be removed or cleaned in a solution of soda, lime, or caustic soda, or in some solution which will neutralize the acid previously applied to the iron. We also claim urging or forcing by means of liquid, steam, or atmospheric pressure, the neutralizing solution of soda, lime, caustic soda, or such other solution as will neutralize the acid previously applied to the iron into the pores or interstices in the iron."

No. 2841. Lewis Miller, of Canton, Ohio, for an "Improvement in harvesting machines."

"I claim, in combination with a harvesting machine that has its finger bar hinged to the main frame, and whose reel is operated from the main driver wheels or axle, a toggle link connection between said drive-wheels or axle and the reel shaft, so that the finger bar and its appliances may be free to rise and fall in conformity to the inequalities of the ground over which it is passing, and continue to be driven without cramping, substantially as described."

No. 2842. Henry Movers, of Toledo, Ohio, for an "Improved mode of heating moulds."

"I claim the heating (by means of steam) the chills or moulds for hardening the tread of cast iron wheels or wheel tire for railroad cars or carriages in the mode substantially as above described."

No. 2843. Daniel Moore, of Brooklyn, N.Y., for an "Improvement in breech-loading fire-arms."

"I claim, first, the breech block *d* sliding on the line of the barrel combined with the rectangular block *e* moving at right angles to said block *d*, in the manner specified, so that the block *e* is drawn down for the block *d* to slide back and over said block *e*, as set forth. Second, I claim the lever *h* on the fulcrum 4, with the arms *i* and *k* in combination with the blocks *d* and *e*, so that the movements specified are given to said blocks by said lever as set forth. Third, I claim the semi-circular grooved piece 3 to receive the flange of the cartridge in combination with the breech block *d*, fitted and acting as set forth, Fourth, I claim the spoon shaped piece *b* on the lever *h* to receive the cartridge when entered, or to loosen the metallic case from the groove 3, as set forth."

No. 2844. E. A. and Samuel Moore and David Mooney, of Findley, Ohio, for an "Improvement in cattle pumps."

"We claim the arrangement of the tilting platform I, and bar or lever J, loaded as shown, in combination with the force pump, partially or wholly submerged, and provided with the jointed elevation tube F, valves C, G, and solid or close piston D, as and for the purpose set forth."

No. 2845. George W. Oakeley, of Reading, Pa., for an "Improvement in heaters."

"I claim the flues B, B, arranged in tiers over tier, being inclined in a direction contrary to that of the adjacent tier, in combination with the inclined partitions D, D, the whole being arranged within a casing of any desired form, substantially as and for the purpose herein set forth."

No. 2846. Oscar Paddock, of Watertown, N.Y., for an "Improved ice cream freezer."

"I claim, first, in a freezing vessel designed to rotate its axis, I claim the stirring blades or studs arranged upon and around the said vessel, substantially as herein described, so that the ice in immediate vicinity of the said vessel shall be constantly stirred, and the salt precipitated to the bottom of the reservoir mixed with the ice as herein set forth. Second, forming the pivot of the freezing vessel of a spherical or conical shape externally, with an angular cavity internally, in combination with a cylindrical spindle having angular ends to fit the said cavity and crank, whereby rotation may be imparted to the vessel without fastening the spindle thereto. Third, combining with the spindle and freezing vessel constructed as herein described a hollow spindle provided with scraping blades the former having an angular head for holding the scrapers stationary within the vessel while it is being rotated, substantially as and for the purpose set forth. Fourth, providing the cover of the freezing vessel with adjustable flaps to clasp when necessary the solid spindle, so that the scraping blades may be removed when the ice shall have acquired a certain degree of consistency."

No. 2847. William B. Ready, of Sacramento, Cal., for an "Improvement in gang plows."

"I claim, 1st, the curved beams A, when used in connection with a gang-plow, or a series of plows, connected together by cross bars B, B, B^1, constructed and operating as and for the purpose herein set forth. 2nd, the arrangement of the arms G, wheels I, and the lever J, when attached to the right hand arm G, and connected to the central beam A, as and for the purpose set forth."

No. 2848. Charles G. Sargent, of Graniteville, Mass., for an "Improvement in machines for cleaning fibrous materials."

"I claim picking the fibre at the front and rear of the machine, in combination with two inrushing currents of air, substantially as described. I also claim, in combination with the picking of the fibre at the front and rear of the machine, and the two inrushing currents of air for carrying the lighter impurities up into the machine, the two passages immediately below the picking points for the grosser impurities to fall into, substantially as described. I also claim, in combination with the main cylinder D, and the toothed cylinder I, the guard cylinder J, in connection with the open space leading into said cylinder D, for the air to pass in, substantially as and for the purpose described. I also claim in combination with an exhaust fan arranged over the machine, and the air passages leading to it from the front and rear of the machine, for carrying off the lighter impurities, and the passages below for the grosser impurities to fall into, the cylinders J, I, M, for the double purpose of closing that part of the machine against the admission of air and for separating and carrying out at different points or places the cleaned fibre, the dust, and the grosser impurities without allowing them to mingle after they are once separated, substantially as described."

No. 2849. John Scheeper, of New York, N.Y., for an "Improvement in combined carriage lantern and axle lubricator."

"1st, I claim feeding a carriage lantern and axle bearing with oil from the same reservoir substantially as described for the purpose set forth. 2nd, the reservoir E screw cap J, horizontal perforated tube F, screw nuts *b*, *c*, tube *e*, collar C, and axle bearing B, when combined, arranged, and operating in the manner described."

No. 2850. Samuel J. Seely, of Brooklyn, N.Y., for an "Improvement in portable body battery."

"I claim, 1st, the general arrangement of the portable battery, constructed and operated as shown and described. 2nd, the use of the breast or body plate A, in combination with the series of barrels B, for the purposes set forth. 3rd, the combination of the breast or body plate A with the breast plate F, as shown, whereby the series of barrels B can be loaded readily from the breech by the wearer and operator of the battery, as described. 4th, the use of the arrangement of the apertures communicating from the first to the last of the series of barrels B, as described, by which the whole of the series of barrels are fired by the explosion of a single percussion cap or wafer (avoiding the necessity of using a train or fuse to effect that purpose) as set forth."

No. 2851. Francis B. Stevens, of Weehawken, N.J., for an "Improvement on cut off valve motion."

"1st, I claim setting the tappets that work the eduction valves on the same shaft and at or near the same angle of depression that the tappets of Stevens' cut off are set so that the eduction valves can be lifted at the same speed that the induction valves are lifted by Stevens' cut off. 2nd, I claim, the hinge pieces E, F, G, and H, hinged at the ends of the tappets A, B, C, and D, and raised and lowered by the small tappets L, M, N, and O, these small tappets being attached to the hollow rock shaft I, placed over the rock shaft *d*, and worked by the eccentric motion that works the eduction valves in Stevens' cut off as commonly constructed."

No, 2852. Francis B. Stevens, of Weehawken, N.J., for an "Improved condenser for steam engines."

"I claim, 1stly, the combination of a surface or external condenser with a cooler, so that a part of the steam is condensed by external condensation and a part by the injection of water withdrawn from the condenser cooler after having been cooled there. 2ndly, the combination of a surface or external condenser placed between the side pipes and the ordinary condenser of a steam engine with a cooler for cooling the water from the hot well; this cooler being placed between the hot well and the ordinary condenser; so that the steam after being partially condensed by the external condenser is then further condensed by means of the injection of the cooled water from the hot well into the ordinary condenser, the surfaces of both external condenser and cooler being cooled by the application of water."

No. 2853. Francis B. Stevens, of Weehawken, N.J., for an "Improved condenser for steam engines."

"I claim, 1st, a condensor or cooler for steam engines, formed by a series of parallel rectangular passages *b*, *b*, *b*, through which the steam to be condensed or water to be cooled passes, whilst the current of the cooling water is made to pass through the passages *a*, *a*, *a*, on the reverse side of the surface and in a current at right angles to the current of the steam to be condensed or water to be cooled; and forming these passages by means of the rectangular metallic plates *c*, *c*, *c*, made separately and bolted together by the bolts *e*, *e*, *e*, or cast together as shown in figures V, VI, VII, and VIII, also two or more of these condensers combined into one by being attached to each other by the screw bolts *o*, *o*, *o*. 2nd, reversing the current of the water to be cooled by means of the cap pieces *r* and *s*, so that it may be made to flow in succession through two or more of the rectangular passages *b*, *b*. 3rd, the guiding plates K, K, K, as a means of guiding the water into the rectangular passages, so that it may be equally distributed. 4th, the deflecting pieces *h*, *h*, *h*, so arranged as to gently deflect the cooling water into the rectangular apertures *a*, *a*, *a*. 5th, two or more apertures *t*, *t*, *t*, made through the side of the vessel or ship in combination with the condenser or cooler, and also in the same combination the sloping recesses *u*, *u*. 6th, in combination with the condenser or cooler the pipe H, turned upward as a device to render the condenser or cooler accessible without the intervention of a cock or valve; also the small pipe and cock Y, connecting the pipe at or near the summit of the turn with the interior of the condenser."

No. 2854. Francis B. Stevens, of Weehawken, N.J., for an "Improvement on cut-off."

"I claim adding to Stevens' cut-off the shaft A, and tappets E and F, the lifters Q and R, the hinge pieces O and P. Also adding the right and left handed screw H, working the nuts I and K, backwards and forwards, and elevating and depressing the tappets E and F."

No. 2855. Emil Fritten, of Philadelphia, Pa., for an "Improvement in lamps."

"I claim the sliding cap C, formed of a lower conical part *a*, surmounted by a deflector *b*, said parts being perforated and the cap connected with the wick tube B, by having the latter pass through the bottom *e* of the former, substantially as and for the purpose set forth. I further claim having the bottom *e* of the cap C constructed of wood or other substance, which is a good non-conductor of heat, when said cap is used in combination with the wick tube B, and all arranged as and for the purpose specified."

No. 2856. J. B. Turner, of Jacksonville, Ill., for an "Improvement in cultivators."

"I claim, 1st, in combination with a main frame, supported on and carried by a drum B on one side serving as a roller, and a wheel C on the opposite side, a hinged plough frame

D, controlled by said main frame, substantially as described. I also claim the combination of the pivoted levers E, P, with a horizontally hinged tongue O, so that the driver from his seat may change the line of draught and the direction of the machine, substantially as herein set forth. I claim the angularly shaped brace *n* for holding the mould board to the brace at its upper portion, when it also admits of having the unobstructed space between the mould board and the brace as at *h*, for the purpose as herein described. I also claim fastening the mould boards to the plough frame by means of the cross braces *i*, *j*, brace *n*, and staple *m*, with its key, in the manner and for the purpose herein described. I also claim the removable extension piece *t*, in combination with the mould board, for the purpose described."

No. 2857. Washington Whitney, of Baldwinsville, Mass., for an "Improved clothes wringer."

"I claim the within described wringing machine having its rolls B and C drawn together by the spring G, which is pivoted at one end to the frame and is compressed by an attachment *g* to the upper, as set forth for the purpose specified."

No. 2858. W. A. Wood, of Hoosick Falls, N. Y., for an "Improvement in harvesters."

"I claim connecting a short finger bar to the bent bar E at or near the line of the axle or centre of the main driving wheel, in combination with the hinging of said bent bar to or near to the stubble side of the main frame by rods or braces, substantially in the manner and for the purpose herein described."

No. 2859. James A. Woodbury, of Boston, Mass., for an "Improvement in projectiles for smooth bored ordnance."

"I claim, 1st, channelling or grooving in the manner explained the surface of an elongated projectile tapering towards both ends, for the purpose of producing the greatest rotative force with the least possible atmospheric resistance. 2nd, the use of a sabot, spirally or obliquely winged or grooved so as to receive rotation by the action of the gases escaping in the act of firing in the described combination with a projectile spirally winged or grooved in the opposite direction so as to receive a corresponding rotation by the action of the atmosphere during its flight."

No. 2860. Suspended.

No. 2861. Lewis R. Carpenter, of Lancaster, Ohio., assignor to himself and Samuel K. Williams, of same place, for an "Improvement in carriage brakes."

"I claim hanging or arranging the shaft that winds the chain and applies the brake, substantially as described, so that when the fore-end of the pole or perch is depressed in descending a hill, the roller S, will swing against the wheel or hub and be turned, so as to wind the chain and apply the brake, and when the fore-end of the pole is raised the wheel will swing from the hub and release the brake. I also claim the cam U, on the shaft L, for the purpose specified, substantially as described."

No. 2862. Joseph B. Clark, of Manchester, N.H., administrator of David F. Smith, deceased, late of said Manchester, assignor to Aaron W. Smith, of same place, for an "Improvement in fliers."

"I claim the mode of regulating the presser by means of the adjustable spiral spring S, connected thereto substantially as herein described and for the purposes set forth."

No. 2863. W. E. Hatfield, of Newark, N.J., assignor to Reuben Raden and G. Hall, for "Improvements in machines for sizing hat bodies."

"I claim the combination of the plates C and H, having either smooth or roughened surfaces with the cisterns and crozing planks, the whole being constructed and operated substantially as and for the purpose herein above specified."

No. 2864. B. B. Hill, of Chicopee, Mass., assignor to himself and H. R. Gardner, of same place, for "Marking brand."

"I claim a marking brand, a case *c*, open on one side to receive the letters *a* for the purpose of providing proper flanges *d* for holding the letters, and bosses K for securing the cap *e* with the letters in place, substantially as and for the purpose described."

No. 2865. Samuel G. Rice, of Albany, N.Y., assignor to himself and Hezekiah Dodge, of same place, for an "Improvement in sash fasteners."

"I claim the rotary catch B, in combination with the ratchet R, and the stop lever L, for the purposes set forth, and substantially as set forth in the above specification."

No. 2866. J. B. Wilson, of Williamstown, N.J., assignor to himself and John M. Moore, of Fisherville, N. J., for an "Improvement in preserving vessels."

"I claim the cover H, its annular flange *h*, the annular projection *i*, and gum elastic ring I, in combination with the tapering mouth *a*, of the vessel and the collar *b*, together with the yoke B, or its equivalent, the whole being arranged as set forth for the purpose specified."

No. 2867. Joseph Wood, of Red Bank, N. J., assignor to himself and Edwd. W. Serrell, of same place, for an "Improvement in the mode of oiling journals."

"I claim the manner herein specified of supplying oil or lubricating material to journals by the employment of the material described in the manner and for the purposes set forth."

No. 2868. Thomas Bracher, of New York, N.Y., for an "Improvement in manufacturing bonnets."

"I claim the combination of a former A, of the desired shape, and a stretcher or upper instrument B, constructed and operated substantially as described, to draw and hold the material upon the former while being shaped, whereby I am enabled to dispense with a heated upper die, and make bonnets, hats, &c., of different material and thicknesses upon the same former, substantially as set forth and specified."

Re-issues.

No. 135. Edward Lynch, of Washington, D. C., for an "Improvement in steam engines."—Patented 12th April, 1859.

"I claim, 1st, the arrangement of the several parts of the engine in their relation to each other, and the propeller shaft as herein set forth. 2nd, I claim constructing the connecting rod of one of the cranks or cross-heads in the manner described so as to allow of its surrounding the propeller shaft as herein described. 3rd, I claim acting upon the condensing water and the water of condensation, or using the opposite ends of the same, double acting pump for the air pump, and for the circulating pump of a surface condenser, that is, one end for the air pump and one for the circulating pump, substantially as described."

No. 136. Samuel Pierce, of Troy, N.Y., for an "Improvement in cooking stoves."—Patented 6th December, 1845; re-issued 12th April, 1847, and 31st July, 1847, and extended.

"I claim the extending of the front lower part of the oven under the fire grate (a^1) by means of the said plate (b^1), substantially as and for the purposes herein described and set forth."

No. 137. Samuel Pierce, of Troy, N.Y., for an "Improvement in cooking stove."—Patented 6th December, 1845; re-issued 12th April, 1847, and 31st July, 1847, and extended.

"I claim, 1st, the arrangement of the parts by which the fire is supplied with heated air by its passage through the apertures in the front plate or doors and against the said plate *s* in front, and down the front surface of which it must pass on its passage to the under part of the said fire chamber, and through the fire grate a^1 into the fire, substantially as and for the purpose herein described and set forth. I also claim the making of the top of ovens of cooking stoves of fire brick or other earthy substance, when this is combined with a stove in which the products of combustion from the fire chamber pass first over the top of the oven, substantially as described, whereby the heat in the oven is equalized, and the vapors or gases evolved in the oven are absorbed and carried off, as described."

Re-issue No. 138 suspended.

No. 139. W. O. Grover, of Jamaica Plain, and Wm. E. Baker, of Boston, Mass., assignors to Grover and Baker Sewing Machine Company, for an "Improvement in sewing machines."—Patented 11th February, 1851; re-issued 15th June, 1858.

"1st, we claim in combination first an eye pointed needle which descends and carries its thread through the material supported on a table; second, a table which supports the material horizontally below the needle and above a thread carrier; third, a thread carrier below the table, carrying a thread which is not passed through the material, operating together substantially as set forth, in a machine making the double looped seam herein described. 2d, we claim in combination, first, a horizontal table or support, second, a feeding apparatus, third, a stitching apparatus, each having the distinguishing characteristics herein-before specified, and operating substantially as set forth to make the double looped seam herein described."

Design.

No. 139. Elias Ingraham, of Bristol, Conn., for a "Design for a clock case."

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 10th December, 1861, and each bearing that date.

No. 2869. Levi Abbott, of Boston, Mass., for an "Improvement in gas regulators."

"I claim, 1st, the construction of the valve and valve seat of a gas regulator of vulcanized india-rubber, substantially as and for the purpose herein specified. 2nd, forming a guide for the valve stem, within the regulating screw E, applied at the bottom of the stem, substantially as herein specified."

No, 2870. James R. Baylis, of Baltimore, Md., for an "Improved double cone marine propeller."

"I claim the construction of a double cone propeller having its oars or blades constructed, and when arranged relatively to the hub or axis, substantially as and for the purpose described."

No. 2871. Edwin Bowen, of Meriden, Conn., for an "Improvement in mode of securing chimneys to lamps."

"I claim the slide D, fitted horizontally in the lamp-top A, provided with a hook *a* at one end, and having a spring E, bearing or acting against it within the top, substantially as and for the purpose set forth."

No. 2872. Lewis Wells Broadwell, of St. Petersburgh, Russia, for an "Improvement in breech loading ordnance."

"I claim the employment for elevating and depressing the breech-block B, for opening and closing the breech, of a shaft *g*, arms *h*, *h*, and links *i*, *i*, the whole combined, arranged, and operating, substantially as herein specified."

No. 2873. Louis Jacques Chateau, of Paris, empire of France, for an "Improved machine for breaking the subsoil."

"I claim, first, the breaking instrument constructed and arranged as herein specified. I also claim, connecting the breaking instrument with the carriage by means of a compound reach pole, as described. I also claim, in combination therewith the regulator *i*, in the manner and for the purposes set forth; and I further claim in combination with the apparatus herein specified, the hoist for elevating the breaking apparatus, as described."

No. 2874. John De Long, of Monroe, Wis., for an "Improved washing machine."

"I claim the employment of the adjustable, hinged frame B, forming both a lever and rubber when constructed, and arranged to operate with the box A, as and for the purpose specified."

No. 2875. H. H. Dickinson, of Hartford, Conn., for an "Attachment to kerosene lamps."

"I claim the adjustable tube or thimble C, surrounding the round wick tube of an ordinary lamp, said thimble being of conical form at top and having points *b*, *e*, and interstices *a*, *d*, at top and bottom operating in the manner described, for the purpose set forth."

No. 2876. Gustavus D. Dows, of Boston, Mass., for an "Improved soda apparatus combined with an ice cutter."

"I claim, 1st, the arrangement for cutting ice of one or more cutters placed in a vertical cylinder, when the same are so arranged as to permit the passage downward of the ice, and are in combination with substantially the screw shafts T and S, nuts X, X, and follower Y, Y. 2nd, I claim the arrangement of the ice cutter substantially as and for the purpose above described, when the same is in combination with the enveloping chest A, A, A, A, syrup vessels B, B, and cream chest H. 3rd, I claim the combination of the cream chest H*, the enveloping chest A, A, A, A, the ice chest C, C, C, C, and syrup vessels B, B, all arranged substantially as and for the purpose above described."

No. 2877. Jacob Early and J. B. Parvin, of Hightstown, N.J., for an "Improvement in seeding machines."

"I claim, 1st, the reciprocating slide G, formed of two adjustable perforated plates *e*, *e*, in combination with the stationary cut-off brush F, and perforated bottom *e* of the seed box E, all arranged as and for the purpose set forth. 2nd, the combination and arrangement of the parallel adjustable bars K, oblique braces L, plow standards M, and levers N, N, substantially as and for the purpose set forth."

No. 2878. J. W. Fawkes, of Decatur, Ill., for an "Improvement in steam plows."

"I claim, 1st, the combination, for the purpose of plowing, ditching, &c., by steam, of a stationary and traction engine, windlass attachment, and plow frame, substantially as set forth. 2nd, the peculiar arrangement of the geared drum B, shifting wheels R, R, and geared rollers Z^1, Z^{11}, which form a windlass, substantially as herein shown and described, for the purpose of readily changing the engine from a traction to a stationary one, and vice versa, when said windlass and engine are used in combination with plows for the purpose specified. 3rd, the adjustable draught-bar C^1, of the frame B^1, arranged substantially as shown, to admit of the adjusting of the frame B^1, for the purpose described."

No. 2879. C. J. Glenn, C. Ball, and U. S. Hackett, of Unadilla, Mich., for an "Improvement in stump extractors."

"We claim the employment of the levers C and D, the cords E and F, the block G, and the pulleys *a*, *a*, *d*, constructed and arranged for extracting grubs and stumps, substantially as herein specified."

No. 2880. W. H. Gwynne, of Brooklyn, N.Y., for an "Improvement in machinery for rifling guns."

"I claim, 1st, the direct application of hydraulic pressure for the purpose of rifling guns. 2nd, the combination of the hollow shaft F, expanding rod E, cutters D, D, piston C, the whole operating substantially as described and shown."

No. 2881. Thomas Holmes, of Williamsburg, N.Y., for an "Improvement in embalming."

"I claim the combination of the chamber B, inclosed pump C, and regulating stop-cock H, in the manner and for the purpose stated."

No. 2882. Benjamin Hoyle, of Martin's Ferry, Ohio, for an "Improvement in thrashing machines."

"I claim in combination with a thrashing machine the combination and arrangement of the shoo J, screen *g*, and fan K, over the straw carrier to rescreen and refan the grain, and deliver the tailing to the thrashing cylinder, substantially as described."

No. 2883. Wm. H. Joeckel, of New York, N.Y., for an "Improved seat for railroad cars and schools."

"I claim, 1st, the reversible side pieces *b*, *b*, attached to the seat supports A, A, at the points specified, in connection with the independent adjustable rest or back support B, arranged substantially as and for the purpose set forth. 2nd, the combination of the side pieces *b*, *b*, and adjustable seat B, attached to the supports A, A, and arranged to operate as and for the purpose set forth."

No. 2884. H. W. Johnson, of Athens, Penn., for an "Improved washing machine."

"I claim, 1st, the inclined ways *b, b*, and friction rollers *a*, in combination with the bearing strips *c*, and springs *f*, as and for the purpose specified. 2nd, the clamping and stationary holding bars *i, j*, and *m*, in combination with the intervening corrugated or fluted sections *h*, as and for the purpose set forth. 3rd, the clamping and stationary holding bars *i, j*, and *m*, in combination with the opening *n* in the cylinder, as described. 4th, the hollow cylinder with its opening *n*, in combination with external corrugations *h*, and the concave corrugated or fluted bottom B of box A, as and for the purpose described."

No. 2885. Wm. C. Kneeland, of Brooklyn, N.Y., for an "Improvement in cigars."

"I claim, as a new article of manufacture, a smoking cigar produced from fine cut tobacco enclosed first within a tube of silk or other tasteless and inodorous materials, and afterwards covered with a wrapper of tobacco, in the manner described."

No. 2886. Edward Kirk, jr., of New York, N.Y., for an "Improvement in cook stoves."

"I claim having the flanch E, which receives the smoke pipe formed on one of the lids or covers D, of the pot holes, and arranging the dampers and flues of the stove, substantially as shown, or in an equivalent way, to admit of a direct draught or a circuitous one around the oven C, in either positions of the lid or cover D, for the purpose set forth."

No. 2887. P. Franklin Jones, of New York, N.Y., for an "Improvement in operating heavy guns."

"I claim the cog circle B, in combination with the pinions L and N, or either of them when constructed as described and used in connection with the traverse circle A. I also claim the cogged semicircle C (attached to the chase or neck, and to the cascabel, as described), in combination with the worm A^1, as and for the purpose set forth. I also claim the fixed circular slotted scale or gauge D^1, when constructed and arranged, substantially as above specified. I further claim the cogged semi-circle C^1, and worm A^1, in combination with the fixed circular slotted scale or gauge, as described. And lastly, I claim the cogged circle B, with its pinion or pinions, in combination with the cogged semicircle C^1, and worm A^1, as and for the purpose indicated."

No. 2888. Henry Killam, of New Haven, Conn., for an "Improved stop for coach doors."

"I claim the curved bar F, slide G, and guide rod H, arranged as shown, and applied respectively to the door A, and seat rail E, as and for the purpose set forth."

No. 2889. Eugene Lacroix, jr., of Rouen, France, for an "Improved marine propeller.

"I claim the combination, of a propeller mounted on a sliding frame, as herein set forth so as to be raised and lowered within a recess in the stern of the vessel, so that said sliding frame shall receive its support from the sides of the recess to strengthen and brace the frame and protect the propeller, as and for the purposes described."

No. 2890. Charles W. Lord, of New York, N.Y., for "Pen and pencil case."

"I claim, as a new article of manufacture, a penholder and pencil case, having metallic conical thimbles *b*, arranged in the bottom of each of its several compartments, when constructed, combined, and operating in the manner and for the purpose set forth."

No. 2891. Lewis Miller, of Canton, Ohio, for an "Improvement in grain and grass harvesters."

"I claim, 1st, in combination with the main frame having drooping ends, a tie rod, that may serve as a hinge for the coupling arm and brace, substantially as herein described and for the purpose set forth. I also claim, in combination with the widening out of the rear portion of the main frame end of the finger bar a brace *m*, for the purpose of making a long hinge and strong connection between the finger bar and coupling arm, without the use of an intermediate shoe, substantially as described. I also claim, in combination with a finger bar that is made in two sections longitudinally a cutter and cutter-bar also made in sections, so that the finger bar and cutters may be shortened or lengthened, for cutting grass or grain as herein described and represented. I also claim, in combination with a pivoted or hinged track clearer, the slot, set screw, and shoulder, or their equivalents, for the purpose of controlling the descent of the track clearer whilst it is in operation, and for allowing it to be swung up, and held up, out of the way, when the machine is being transported from place to place, substantially as herein described."

No. 2892. Hezekiah W. Miskimen, of Kingston Mines, Ill., for an "Improved automatic gate."

"In combination with the gates I claim the mechanism described for opening and closing them, consisting of the rock shafts, arms, links, and weight, constructed and arranged as set forth. I claim the hinged vibrating plank at the end of the platform, in combination with the levers *e, e*, and locking lever *a*, constructed to operate as described for the purpose set forth."

No. 2893. Charles Montague, of Hartford, Conn., for a "Printing press."

"I claim, 1st, the combination of two cylingers for letter press printing in different colors, whereby a sheet once fed to the small cylinder is printed with various colors before leaving the press, for the purpose and substantially in the manner described. 2d, interchangeable ink rollers, in combination with the cylinders A, B, to ink the different forms with different colors, for the purpose and substantially in the manner described."

No. 2894. David A. Moore, of Syracuse, N.Y., for an "Improvement in lamps."

"I claim the entire arrangement for raising and lowering the sliding tube D and wick, for the purpose of regulating the flame. In this arrangement (all of which I claim as my invention) I include the slit C in the internal tube B, the wire or metallic strip G, the attachment of this wire to the sliding tube D, the concave plate I, the funnel K, for guiding the wire or strip through the aperture in the plate."

No. 2895. Charles Morrill, of New York, N. Y., for an "Improvement in bit braces."

"I claim the bit brace head A and cam B, in combination with the spring D, as described for the purpose specified."

No. 2896. C. L. Pascal, of Philadelphia, Pa., for an "Improvement in military hats."

"I claim a military hat, having the reversible flap B formed and arranged substantially as described when the ends of the said flap are constructed for attachment to and detachment from the peak or shade C, in the manner and for the purpose specified."

No. 2897. Alfred Polino, of Paris, empire of France, for an "Improved camp bedstead."—Patented in France 23rd April, 1861.

"I claim the X-shaped supports provided with the metallic dowels or tenons (*e, e, f, f*,) entering the ends of the metallic tubes (B, C, D, B^1, C^1, D^1,) in the manner and for the purposes specified."

No. 2898. David Pollock, of Lancaster, Pa., for an "Improvement in connecting rods for locomotives."

"I claim, 1st, a metal rod, when made flexible and combined with a yoke or stops for the purpose of regulating it to any degree of flexibility or tension, substantially as and for the purpose set forth. 2nd, a strap with adjustable or movable inner projecting plate, when combined with a metallic rod and boxes, as and for the purpose specified. 3rd, the raised or widened outer edges or sides of the strap in combination with the metal rod and boxes, in the manner shown and described. 4th, corresponding projections on the sides at the end of the rod in combination with a strap, as shown. 5th, the reversed keys, when combined with the metal rod, strap, and boxes, as set forth. 6th, the adjusting conical pointed set screws and cup, for the purpose set forth."

No 2899. John H. Pomeroy, of Jordan, N. Y., for an "Improved steam engine governor."

"I claim, 1st, in such governor the combination of the wings K, K, with the inclines H, H, arranged and operating substantially as above described. 2nd, I claim the combination of the wings K, K, with the inclines H, H, and the wheels or rollers *f, f*, arranged substantially in the manner and for the purpose above described. 3rd, I claim the combination of the wings K, K the inclines H, H, the wheels *f, f*, and the rod J, the whole operating for the purpose and substantially in the manner above described."

No. 2900. Robert D. Porter, of Zanesville, Ohio, for an "Improvement in curry combs."

"I claim the mode of fastening the teeth and other parts of the comb together in a compact and substantial manner, substantially the same and for the purpose herein set forth."

No. 2901. G. T. Sawyer, W. Howland, jr., and T. C. Hatch, of New Bedford, Mass., for an "Improvement in setting stills."

"We claim the arrangement of the equal drop flues D with the vessel A, connecting flue E, and chimney G, as herein shown and described."

No. 2902. L. W. Shaffar, of Shelbyville, Ky., for an "Improvement in ploughs."

"I claim the combination of the steel mould board when made as above described, the cast-iron standard provided with the flanges on its top, the recess for the point, the projection for holding the brace, the recess on the land side, and removable plate H, to fit the same, with the reversible point, when the whole are constructed and arranged as and for the purposes described."

No. 2903. Wilson H. Smith, of Birmingham' Conn., for an "Improvement in breech-loading fire-arms."

"I claim the combination with the lever E, sliding and swinging breech B, and hammer F of the tooth *i*, cam *j*, horn *k*, hooked tongue *f*, *g*, and projecting plate *l*, *m*, all constructed and arranged as specified, and operating in the manner explained to impart a simultaneous movement to the breech and hammer."

No. 2904. John Tilley, of West Troy, N.Y., for an "Improvement in machines for chamfering barrels."

"I claim the rotary truss rings B, B[1], when constructed and arranged with the end stocks C, C[1], mounted together, and one or both made movable, all substantially as and for the purpose herein set forth. And I likewise claim the arrangement of the two grove-cutting chamfering knives J, J[1], and the two score-cutting levelling knives P, P[1], in combination with the apparatus for holding the revolving cylinder of staves with both ends of the staves exposed, as and for the purpose herein set forth."

No. 2905. John and Wm. Toothill, of Wallingford, Conn., for an "Improvement in portable cooking apparatus."

"I claim the two pans A, B, provided respectively with the false bottoms *b*, *g*, draught openings *f*, *k*, lamp and false side *i*, and with or without the lid or cover E, all arranged as and for the purpose set forth."

No. 2906. F. W. Weiss, of Mount Vernon, N.Y., for an "Improvement in military cloaks."

"I claim the construction of a military cloak or a military coat in the manner described, so as to be capable of conversion at will into an air bed or mattress, substantially as above set forth."

No. 2907. Henry Weissenborn, of Newark, N.J., for an "Apparatus for collecting zinc from waste gases of furnaces."

"I claim separating zinc through an apparatus from the waste gases while conducted from the top of a blast furnace to steam boilers or hot blast oven, in the manner substantially as set forth."

No. 2908. John J. Welling, of Cedar Falls, Iowa, for an "Improved device for weaning calves."

"I claim the jointed curved piece F, provided with prongs B, balls *a*, spring *d*, and standards *e*, the whole constructed and operating substantially as and for the purpose set forth."

No. 2909. A. H. Wellington, of Woodstock, Vt. for an "Improvement in saw gummers."

"I claim the carriage C, laterally sliding shafts B, D, burr A, screw J, and spiral spring *f*, with the clamps I, and pivot screw *e*, when combined, arranged, and operating in the manner described."

No. 2910. F. J. Willett, of Nunda, N.Y., for an "Improvement in pumps."

"I claim the combination of a hand lever *o*, and platform M, oscillating together, when connected with the piston-rod K, of a pump, substantially as described, so that the combined exertions of the muscular power of the arms, and the weight of the body may be employed for working the pump. I also claim the employment of the disks *m*, *m*, in combination with the packing *f*, rod *k*, and piston cylinder B[1], arranged and operating substantially in the manner and for the purposes set forth. I also claim the combination of the cylinder A, and pipe or pipes C, D, thimbles *e*, *e*, bands *g*, *g*, and wedges *h*, *h*, substantially as shown and described."

No. 2911. W. B. Winchell, of Oak Hill, N.Y., for an "Improvement in hold back hooks."

"I claim the combination of the cam projection or button on the cock-eye or loop, and the recess, or recess and slot, in the hook and plate, when operating together in the manner and for the purpose, substantially as herein described and represented."

No. 2912. Peter Wright, of Dudley, England, for an "Improvement in wheels."—Patented in England 22nd May, 1861.

"I claim, firstly, the formation of the bosses or naves of wheels, in manner herein described, Secondly, the mode of combining or connecting together, as herein described, the several parts of wheels with the exception of that portion of the single disk wheel already alluded to. Thirdly, the manufacture of wheels with cast bosses or naves formed and secured, as herein described."

No. 2913. Alfred Delestatius, of Philadelphia, Pa., assignor to Andrew Rankin, of same place for an "Improvement in manacles."

"I claim the portion A of the ring with its rounded projection *f*, in combination with the portion A[1], of the ring and its projection *e*, the whole being constructed and arranged substantially as set forth, so that on closing or opening the ring the two parts will yield slightly and allow the projection *e* to pass over the projection *f*. 2nd, the spring bolt D, constructed and arranged within the chamber *c*, in relation to the projection *e*, substantially as and for the purpose herein set forth 3rd, the ferrule *q*, and its flange *t*, arranged in respect to the chamber *c*, the entrance *d*, to the same, the stem of the bolt D, and the spring *n*, substantially as described for the purpose specified."

No. 2914. Daniel L. Emerson, of Rochford, Ill., assignor to Mary Manny, of same place, for an "Improvement in harvesters."

"I claim the combination of a wheel with the body of a divider for a harvesting machine in such manner that the wheel forms the front end of the divider, substantially as described. I also claim the combination of a reciprocating cutter of a harvesting machine with a stiff pitman by means of a flexible connection at the end of the pitman that is nearer the cutter, substantially as described. I also claim the combination of the shoe which forms the bearing of the cutter for a harvesting machine with an adjustable guide secured to said shoe, substantially as described."

No. 2915. John Magee, of Boston, Mass., assignor to Norton Furnace Compaay, of Norton, Mass., for an "Improvement in stove grates."

"I claim combining and arranging together the rectangular grate C, with the guard plates D[1], D[11], and the ways *b*, so that the grate cannot only be rocked on its pivot *c*, but be moved in the direction of its length, substantially as above described."

No. 2916. E. M. and J. E. Mix, of Ithaca, N.Y., assignor to themselves and John Gauntlett, of same place, for an "Improvement in padlocks."

"I claim the arrangement of the sector tumblers D, guide pin *k* of the key F and the dog C, substantially as shown and described, for the purpose of admitting the key F to be turned in either direction to unlock the lock, and also to prevent the internal parts of the lock being injured by the insertion of false keys, as set forth."

No. 2917. A. K. Tupper, of Pontiac, Mich., assignor to himself, Joseph E. Tupper, and Jno. W. Green, of same place, for an "Improvement in gas retorts."

"I claim the coke box or basket C, combined with the cover or cap B of the retort, substantially as and for the purpose herein specified."

No. 2918. Jacob Widmer, of New Haven, Conn., assignor to H. B. Bigelow, of same place, for an "Improvement in machines for cutting roots."

"I claim the adjustable eccentric cylinder C, in combination with the rotating heads or disks F, G, knives H, and hopper B, arranged substantially as and for the purpose set forth."

No. 2919. George B. Adams, of Cambridge, Mass., assignor to himself and James M. Stone, of Charlestown, Mass., for an "Improvement in supporting tents."

"I claim supporting a tent cover on a centre pole by means of detached braces, whose inner ends are held and made by means of shouldered recesses on said centre pole, and whose outer ends pass through grummet holes in said cover, as herein represented and for the purpose set forth."

Re-issues.

No. 140. C. Aultman and L. Miller, of Canton, Ohio, for an "Improvement in mowing machines."—Patented 17th July, 1856; re-issued 19th July, 1589.

"We claim mounting the two driving wheels and one main gear wheel upon a common axle, in combination with a ratchet wheel for each driving wheel, each ratchet wheel fitted with a pawl that can be made to stand in or out of gear with the ratchet teeth at will, the whole arranged and operating substantially as described."

No. 141. C. Aultman and L. Miller, of Canton, Ohio, for an "Improvement in mowing machines."—Patented 17th July, 1856; re-issued 19th July, 1859.

"We claim in combination with a hinged finger-bar and cutter a stop, which, when the finger bar is raised up, will prevent the cutter from dropping out of its bearings, substantially as described."

List of Specifications published during the week ending 4th January, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
1099	3*d.*	De Bassano, E.—Stearine.
1222	3*d.*	Hildebrand, A. F. — Propelling and steering carriages.
1268	5*d.*	Bennett, W. H.—(*A communication from E. Servier.*)—Gas regulator.
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1301	6*d.*	De Beaumont, H. B.—Ploughs.
1302	6*d.*	Donisthorpe, G. E. — Apparatus for getting coal.
1303	7*d.*	Naglost, G. B.—(*Partly a communication from J. Zöchling.*)—Cannon and projectiles.
1304	4*s.* 7*d.*	Newton, W. E.—(*A communication from S. D. Tucker.*)—Printing machinery.
1305	6*d.*	Lumb, L., and Butterworth, W. H.—Undercovers for carding engines.
1306	10*d.*	Nuttall, C.— Grinding the cards of carding engines, &c.
1307	10*d.*	Hynam, J. — Arranging splints for matches.
1308	9*d.*	Tebbutt, W.—Ventilating.
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1311	6*d.*	Brooman, R. A. — (*A communication from N. E. A. Paret.*) — Portable cooking apparatus.
1312	5*d.*	Partridge, E.—Lubricating carriage axles.
1313	7*d.*	De La Tour-du-Breuil, H. M. F. J. Vicomte, and De la Tour-du-Breuil, A. M. A.—Copying press.
1314	1*s.* 1*d.*	Batty, C.—Warming and ventilating.
1315	3*d.*	Collingham, C., and Mason, M.—Flyers for spinning machinery.
1316	3*d.*	Danchell, F. H.—Testing and purifying water.
1317	3*d.*	Joslin, R.—Scarfs.
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1319	5*d.*	Paterson, J.—Clasps or buckles.
1320	5*d.*	Preece, R.—Floors.
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List of Specifications—*continued.*

No.	Price.	Name of Patentee and Subject-Matter.
1330	5*d.*	Churchill, Lord A. S., and Schenley, E. W. H.—(*A communication from A. H. Rowand.*)—Buffing and coupling apparatus.
1331	1*s.* 7*d.*	Lee, J. and Taplin, B. D.—Portable or traction steam engines, &c.
1332	10*d.*	Holbech, W. B.—Apparatus for sowing seed.
1333	10*d.*	Nicholson, W. N.—Hay-making machines, &c.
1334	7*d.*	Birkbeck, G. H.—(*A communication from F. Normand.*)—Converting circular motion into alternate rectilinear motion.
1335	3*d.*	Burnham, E. R.—Boots, shoes, &c.
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1345	3*d.*	Newton, W. E.—(*A communication E. G. Pomeroy.*)—Refining iron, &c.
1346	3*d.*	Rooff, W. B.—Window seats.
		Disclaimer. 1856.
1952*	3*d.*	Crossley, J. J., and F., and Bolton, J. —Printing yarns for carpets, &c.

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The following are in the press:—

SHIP BUILDING, &c.
PREPARATION OF FUEL, AND APPARATUS FOR ITS COMBUSTION.
STEAM ENGINES.
BRICKS AND TILES.

B. WOODCROFT.

The above, and all other works published by the Commissioners of Patents, are now on sale at the Great Seal Patent Office, 25, Southampton Buildings, Holborn.

This Journal is published on the evening of Tuesday and Friday, and will be forwarded, post free, to Subscribers. — Terms, 30*s.* per annum. — Subscriptions received at the Great Seal Patent Office, where also single copies, at twopence each, may be obtained.

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THE

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By Authority.

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No. 837. FRIDAY, JANUARY 10, 1862. Price 2d.

Applications for Letters Patent.

(*7th, 8th, and 9th January*, 1862.)

44. Frederick Shaw, Bookkeeper, of Sheffield, in the county of York, for an invention of "A system of stopping railway trains."—Dated 7th January, 1862.

45. James Higgins, of Salford, in the county of Lancaster, Machine Maker, and Thomas Schofield Whitworth, of the same place, Manager, for an invention of "Improvements in machinery or apparatus for spinning and doubling cotton and other fibrous materials."—Dated 7th January, 1862.

46. John Tatham, of Rochdale, in the county of Lancaster, Machine Maker, for an invention of "Improvements in machinery or apparatus for preparing, spinning, and doubling cotton and other fibrous materials."—Dated 7th January, 1862.

47. Benjamin Foster, of Denholme Mills, in the county of York, Manufacturer, for an invention of "Improvements in machinery or apparatus for spinning and doubling wool and other fibrous materials."—Dated7th January, 1862.

48. Arthur Wallis and Charles Haslam, of Basingstoke, in the county of Southampton, Engineers and Ironfounders, for an invention of "Improvements in rotary screens."—Dated 7th January, 1862.

49. David Beale, of No. 10, Cobden Street, Saint Leonard's Road, Bromley, in the county of Middlesex, Pattern Maker, for an invention of "An improved method of fastening iron plates to ships' sides."—Dated 8th January, 1862.

50. Louis Wunder, of Liegnitz, in the kingdom of Prussia, Merchant, for an invention of "Improvements in the manufacture and composition of soap."—Dated 8th January, 1862.

51. Anthony Heath, of No. 12, Union Square, Islington, in the county of Middlesex, for an invention of "Improvements in the construction of inkstands."—Dated 8th January, 1862.

52. Samuel Jesson, of Smethwick, in the county of Stafford, Roller, and James Batson, the younger, of Smethwick aforesaid, Iron and Coal Master, and John Moore, the younger, of Langley, near Oldbury, in the county of Worcester, Roll Turner, and James Roberts, of Smethwick aforesaid, Manager of Works, for an invention of "Improvements in the manufacture of gun barrels and wrought-iron tubing."—Dated 8th January, 1862.

53. Charles Pilkington and Thomas Pilkington, both of Sheffield, in the county of York, Joiners' Tool Manufacturers, for an invention of "Improvements in skates."—Dated 8th January, 1862.

54. Joshua Barber, of Preston, in the county of Lancaster, Manager, for an invention of "Improvements in hand mules, consisting of a break and backing off motion."—Dated 8th January, 1862.

55. John Stenhouse, of 11, Upper Brunswick Terrace, Barnsbury Road, in the county of Middlesex, Chemist, for an invention of "Improvements in rendering certain substances less pervious to air and liquids."—Dated 8th January, 1862.

56. Henry Bessemer, of Queen Street Place, New Cannon Street, in the city of London, for an invention of "Improvements in the machinery and apparatus employed in the manufacture of malleable iron and steel."—Dated 8th January, 1862.

57. William Bradshaw, the younger, of Coventry, in the county of Warwick, Watch Maker, for an invention of "Improvements in watches."—Dated 8th January, 1862.

58. Henry Cook, of Manchester, in the county of Lancaster, Gentleman, for an invention of "An improved mode of and apparatus for propelling by the agency of electricity."—A communication to him from abroad by Gaetano Bonelli, of Milan, in the kingdom of Italy.—Dated 8th January, 1862.

59. Charles William Siemens, of 3, Great George Street, in the county of Middlesex, for an invention of "Improvements in the means and apparatus employed for insulating and protecting telegraph conducting wires, and in apparatus for working the same."—The result of his own invention excepting some portion, relating to telegraphic instruments which has been communicated to him from abroad by Dr. Werner Siemens, of Berlin, in the kingdom of Prussia.—Dated 9th January, 1862.

60. James Smith and Stephen Wellstood of Glasgow, in the county of Lanark, North Britain, Stove and Range Manufacturers, for an invention of "Improvements in cooking stoves or ranges."—Dated 9th January, 1862.

61. John Brunt, of No. 15, Rue Petrelle, in the city of Paris, Engineer, for an invention of "Improvements in gas meters."—Dated 9th January, 1862.

62. Thomas Aldridge Weston, of Birmingham, in the county of Warwick, Mechanical Engineer, for an invention of "A new or improved multiplying gearing for transmitting and multiplying power, which said gearing may be applied to cranes, windlasses, capstans, and presses, and to other purposes where it is required to transmit and multiply power."—Dated 9th January, 1862.

63. David Wilson, of Colombo, in the island of Ceylon, for an invention of "Improvements in machinery for pulping and preparing coffee."—Dated 9th January, 1862.

64. Henri Charvet, of Lille, in the department of the Nord, in the empire of France, Manufacturer, for an invention of "Improvements in the spinning of cotton and in its various applications."—Dated 9th January, 1862.

65. David Wilson, of Colombo, in the island of Ceylon, for an invention "Improvements in hydraulic presses."—Dated 9th January, 1862.

66. Joel Haywood Tatum and William James Williams, of 42, Bridge Street, Blackfriars, city of London, Merchants, for an invention of "Improvements in the manufacture and structure of wicks, and in the application of the same to the manufacture of candles."—Dated 9th January, 1862.

67. Richard Archibald Broqman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatus for carburetting and burning gas."—A communication to him from abroad by Léon Farrenc and Henri Glocsener, both of Paris, France.—Dated 9th January, 1862.

68. Benjamin Thompson, of Birmingham, in the county of Warwick, Merchant, for an invention of "Improvements in ordnance and fire arms, and in projectiles to be used therewith."—A communication to him from abroad by Edward Heaton, of Newhaven, in the state of Connecticut, in the United States of America, Gentleman.—Dated 9th January, 1862.

69. Harby Barber, of Belgrave, in the county of Leicester, Manufacturer, for an invention of "Improvements in safety lamps."—Dated 9th January, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2899. To Anthony John Mundella, of the town and county of the town of Nottingham, Manufacturer, and William Onion, of the same place, Mechanic, for the invention of "Improvements in machinery or apparatus for the manufacture of looped fabrics."

On their petition, recorded in the Office of the Commissioners on the 18th day of November, 1861.

2917. To Francis Puls, of No. 25, Francis Terrace, Hackney Wick, in the county of Middlesex, Chemist, for the invention of "Improvements in treating fatty and oily matters."

On his petition, recorded in the Office of the Commissioners on the 20th day of November, 1861.

2981. To François Frédérick Dumarchey, of Boulevart de Strasbourg, in the city of Paris, in the empire of France, Engineer, for the invention of "Improvements in machines for crushing and pounding stones, ore, and other materials."

On his petition, recorded in the Office of the Commissioners on the 27th day of November, 1861.

3027. To André Marie Augustin Pichery and Pierre Louis Danais, both of Nantes, in the department of the "Loire Inférieure," in the empire of France, for the invention of "Improvements in hermetically stoppering or covering jars, pots, vases, and other like articles."

On their petition, recorded in the Office of the Commissioners on the 3rd day of December, 1861.

3067. To Thomas Lawes, of 65, City Road, in the county of Middlesex, for the invention of "Improvements in the manufacture of quilts and coverlets."

3076. And to Balthasar Wilhelm Gerland, of Newton-le-Willows, in the county of Lancaster, Chemist, for the invention of "Improvements in the manufacture of sulphate of copper and other salts of the same metal."

On both their petitions, recorded in the Office of the Commissioners on the 7th day of December, 1861.

3123. To Stephen Barber Hewett, of Railway Cottage, Fairfield Road, Bow, in the county of Middlesex, Engineer, for the invention of "Improvements in the construction of boilers or generators for steam engines and other uses, applicable also to evaporators, and in pumps used therewith or otherwise used, some of which improvements in pumps are applicable to pistons and piston rods generally."

3129. To John Walter Friend, of Freemantle, Southampton, for the invention of "Improvements in apparatus for registering the depth and flow of liquids, and the distances run by ships at sea."

3131. To Thomas Bow Gibson, of the city of Glasgow, Manufacturer, for the invention of "A new or improved method of ornamenting certain fabrics."

3132. To Sylvanus Padley, of Swansea, in the county of Glamorgan, Esquire, for the invention of "Improvements in paddle wheels."

3133. To Pierre Quantin, of Bouscat, near Bordeaux, in the empire of France, for the invention of "Manufacturing moulded earthen or stoneware cross sleepers for superseding wooden ones in the construction of railways."

3140. And to Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in and apparatus for the production and application of motive-power in locomotive and other steam-engines."—A communication to him from abroad by Felix Alexandre Testud de Beauregard, of Paris, France.

On their several petitions, recorded in the Office of the Commissioners on the 13*th day of December*, 1861.

3142. To Eduard Claude Barbotte de Beaulieu, of Avallon, in the department of Yonne, in the empire of France, for the invention of "Improvements in apparatus for extracting gold dust from auriferous sands."

3145. To Colin McDougall and Joseph Crane, both of the city of Manchester, in the county of Lancaster, Wholesale Warehousemen, for the invention of "Improvements in raising and supporting ladies' dresses."

3150. And to Emile Cajot, Merchant, of St. Servais, Belgium, for the invention of "Improvements in the treatment of pyrites for the manufacture of iron."

On their several petitions, recorded in the Office of the Commissioners on the 14*th day of November*, 1861.

3159. To Walter Henry Tucker, of 181, Fleet Street, London, for the invention of "Improvements in locks."

On his petition, recorded in the Office of the Commissioners on the 17*th day of December*, 1861.

3167. To Samuel Sheppard, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "A new or improved tap or stop cock."

3169. To Matthew Cartwright, of Carlisle, in the county of Cumberland, Dentist, for the invention of "Improvements in the manufacture of beds or palates for the reception of artificial teeth."

3173. To John Piddington, of 52, Gracechurch Street, in the city of London, Patent Agent, for the invention of "Improved condensing apparatus for steam engines."—A communication to him from abroad by Wilhelm Winter, of Charlottenburg, near Berlin, in the kingdom of Prussia.

3179. And to Charles Pontifex, of St. Paul's Road, Islington, in the county of Middlesex, and of Shoe Lane, in the city of London, Coppersmith and Vat Maker, for the invention of "Improvements in refrigerators for cooling worts or other liquors."

On their several petitions, recorded in the Office of the Commissioners on the 18*th day of December*, 1861.

3181. To Theodore Bourne, of the city and county of New York, state of New York, United States of America, residing at 16, Charlotte Street, Bedford Square, W.C., London, for the invention of "Improvements in cotton gins."—A communication to him from abroad by Hiram Wilson Brown, of Melville, Cumberland county, state of New Jersey, United States of America, the inventor.

On his petition, recorded in the Office of the Commissioners on the 19*th day of December*, 1861.

3186. To William Makin, of Attercliffe, in the parish of Sheffield, in the county of York, Steel Manufacturer, for the invention of "Improvements in apparatus for the manufacture of cast steel, mill chisels, and other taper tools and files."

3187. To James Standfield, of Aylsford, in the county of Kent, Engineer, and John Standfield, of Stratford, in the county of Essex, Engineer, for the invention of "Improvements in machinery or apparatus for giving motion to ships and machinery and for raising water."

3189. To Charles Edmund Wilson, of Monkwell Street, Falcon Square, in the city of London, for the invention of "Improvements in collars for gentlemen's, ladies', and children's wear."

3191. To Joseph Westwood, of the London Yard, Poplar, in the county of Middlesex, Ship Builder, for the invention of "An improvement in the construction of hydraulic pipes."

3193. To George Walkland, of Saint Pierre-les-Calais, in the French empire, Lace Manufacturer, for the invention of "An improved machine for winding lace or other similar fabrics or tissues on cards or other materials."

3194. To William Tipple, of Clarence Place, Gravesend, in the county of Kent, for the invention of "Improvements in paddle wheels for the propulsion of ships and other navigable vessels."

3195. To Vasco d'Almeida, of Nottingham Street, Marylebone, in the county of Middlesex, for the invention of "An improved mode of obtaining colouring matter applicable to dyeing skins, silk, wool, and other fibrous materials."—A communication to him from abroad by Edward Smith, of Place Cruzquebrada, in the city of Lisbon.

3198. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "A new improved method of preparing silk fabrics to be employed in the manufacture of hats, caps, and bonnets."—A communication to him from abroad by Louis Bayard, of Paris, France.

3200. To Robert Wailes, of Brighton, in the county of Sussex, Doctor of Medicine, for an invention of "An improved tool or apparatus for cleaning windows and glasses."

3201. And to Thomas Green, of Smithfield Iron Works, Leeds, in the county of York, Willoughby Green, of 11, Brunswick Place, Leeds, and Robert Mathers, of Trafalgar Street, Leeds, for the invention of "Improvements in lawn mowing, rolling, and collecting machines."

On their several petitions, recorded in the Office of the Commissioners on the 20th day of December, 1861.

3204. To John Wakefield, of Birmingham, in the county of Warwick, Machinist, for the invention of "Improvements in sewing machines."

3209. To William Loader Allchin and William Allchin, of the Globe Works, Northampton, in the county of Northampton, Engineers, for the invention of "Improvements in apparatus applicable to the superheating of steam."

3211. To Fraser Selby, of Surbiton, in the county of Surrey, Engineer, for the invention of "Improvements in boilers for the generation of steam in engines for applying steam for motive power purposes, and in wheels and ways for steam carriages to run on."

3212. To William Kempe, of Holbeck Mills, Leeds, for the invention of "Improvements in scrays or tables applicable to gig mills, brushing mills, and other like machinery."

3213. And to Charles Osman, of Chryssall Road, Brixton, in the county of Surrey, for the invention of "Improvements in the manufacture and application of elastic or yielding surfaces for sitting, lying, or reclining upon."

On their several petitions, recorded in the Office of the Commissioners on the 21st day of December, 1861.

3214. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in apparatus for cleaning wheat and other grain." — A communication to him from abroad by Jean Pierre Fili, of Paris, in the empire of France, Machinist.

3215. To Louis Rudolph Bodmer, of No. 2, Thavies Inn, Holborn, in the city of London, for the invention of "Improvements in looms for the manufacture of sacks, knapsacks, mattress cases, and other goods."—A communication to him from abroad by Charles Hippolyte Tessier, of Paris, in the French empire, Gentleman.

3217. To John Rosindell, of Mile End, in the county of Middlesex, Brewer, for the invention of "An improved method of and apparatus for separating solid from liquid substances."

3219. To Edward Ede, of 7, Abercorn Mews, Violet Hill, St. John's Wood, in the county of Middlesex, Smith and Farrier, for the invention of "Improvements in the construction of horse shoes."

3220. To John Francis Harvey, of 145, Strand, in the county of Middlesex, Manufacturer, for the invention of "Improvements in umbrellas and parasols."

3223. To Edward Barnard Sampson, of Ham Mills, Stroud, in the county of Gloucester, for the invention of "Improvements in apparatus for drying wool and other fibres and substances."

3224. To John Bland Wood, of Broughton, near Manchester, M.D., for the invention of "Improvements in the manufacture of driving straps or bands, the backs of wire cards, and cop tubes."

3225. To François Laurent and John Casthelaz, of No. 19, Rue Ste. Croix de la Bretonnerie, Paris, Chemists, for the invention of "Improvements in the manufacture of colouring matters."

3226. To John Cochrane, of the Woodside Iron Works, Dudley, Engineer and Ironfounder, for the invention of "Improvements in apparatus employed in sinking cylinders and open coffers for forming foundations under water."

3227. And to George HenryBirkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for the invention of "Improvements in the arrangement of traction and connecting apparatus for railway carriages and trains."—A communication to him from abroad by M. Claude Arnoux, Engineer, of Paris, in the empire of France.

On their several petitions, recorded in the Office of the Commissioners on the 24th day of December, 1861.

3230. To Thomas Standing, of Preston, in the county of Lancaster, Ironmonger, for an invention of "Improvements in cinder sifters and ash receptacles applicable to domestic fire grates."

3232. To Joseph Schloss, of Cannon Street, in the city of London, Merchant, for the invention of "Improvements in envelopes for containing photographic portraits and pictures."—A communication to him from abroad by Simeon Schloss, of Paris, France.

3234. To James Shepherd, of the city of Manchester, in the county of Lancaster, Engineer, for the invention of "Improvements in apparatus for cleansing steam boilers."

3235. To Richard Needham, of Dukinfield, in the county of Chester, Engineer, for the invention of "Improvements in apparatus for cleansing steam boilers and lubricating the pistons of steam engines, and for an improved steam trap."

3237. And to Joseph Nottingham Palmer, of Fenchurch Street, in the city of London, for the invention of "Improvements in cooking stoves and ships' ranges."—A communication to him from abroad by John Russell, resident at Sydney, New South Wales.

On their several petitions, recorded in the Office of the Commissioners on the 26th day of December, 1861.

3238. To William Hawksworth, of Oldham, in the county of Lancaster, Machine Maker, for the invention of "Certain improvements in carding engines."

3239. To Thomas Silver, of Philadelphia, U. S., Gentleman, for the invention of "Improvements in apparatus for governing or regulating the speed of steam and other engines."

3242. To Thomas Bright, of the Old Foundry, Carmarthen, for the invention of "Improvements in machinery for cutting hay, straw, and other vegetable substances."

3244. To William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in steam generators."—A communication to him from abroad by Rafael Rafael, of the city of New York, United States of America.

3245. To James McIntyre, of the city and state of New York, United States of America, for the invention of "Improvements in bomb shells and similar projectiles."

3247. And to Jean Joseph Hector Fajole, of Courbevoie, in the French empire, Gentleman, and, Pascal Achille Agostini, of the same places Doctor of Medicine, for the invention of "An improved composition or improved compositions suitable for painting, varnishing, and coating."

On both their petitions, recorded in the Office of the Commissioners on the 27th day of December, 1861.

3248. To John Whitfield Harland, of Chorlton-on-Medlock, near the city of Manchester, Artist and Engraver on Wood, for the invention of "An improvement or improvements in the manufacture of wood and other types or substitutes therefor or furniture used by letter-press printers."

3249. And to Edward Lord, of Todmorden, in the county of York, Machine Maker, for the invention of "Certain improvements in machinery for preparing cotton and other fibrous substances."

On both their petitions, recorded in the Office of the Commissioners on the 28th day of December, 1861.

3252. To John Peter Dormay, of Wandsworth, in the county of Surrey, James Shirley Aikenhead, of the same place, Boat Builder, and Thomas Johnson, of the same place, Boat Builder, for the invention of "Improvements in the construction of boats for sailing or rowing."

3253. To John Edwards, of 77, Aldermanbury, in the city of London, for the invention of "Improvements in the permanent way of railways."

3256. To George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for the invention of "Improvements in apparatus for raising or forcing water or other fluids."—A communication to him from abroad by Mr. Edward Bruce Boughton Barker, H. B. M. Consul at Samsoun and Sinope, Black Sea.

3257. To William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the manufacture of cube sugar."—A communication to him from abroad by Gustavus Finken, of Brooklyn, King's County, state of New York, United States of America.

3259. And to Alexandre Isaac Austen, of Millwall, in the county of Middlesex, Candle Manufacturer, for the invention of "Improvements in the manufacture of night lights."

On their several petitions, recorded in the Office of the Commissioners on the 30th day of December, 1861.

3261. To Andrew Macnair, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, for the invention of "Improvements in axle boxes for railway carriages."—A communication to him from abroad by Davis Dotterer, of Chicago, Illinois, United States of America.

3263. To Thomas Green and Willoughby Green, both of Smithfield Iron Works, in Leeds, in the county of York, and Robert Mathers, of Trafalgar Street, in Leeds aforesaid, Engineer, for the invention of "Improvements in chains for giving motion to chain wheels, and in giving motion to machinery."

3267. To William Spence, of 50, Chancery Lane in the county of Middlesex, Patent Agent, for the invention for "Improvements in deflectors for lamps."—A communication to him from abroad by Lemuel Beers, of Newtown, Fairfield, in the county and state of Connecticut, United States of America.

3269. To William Henry Bailey, of Salford, in the county of Lancaster, Turret Clock Maker, for the invention of "Certain improvements in sewing machines."

3271. And to William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improved apparatus for boring rocks and other mineral substances."—A communication to him from abroad by Emanuel Lisbet, of No. 45, Rue St. Sebastien, Paris, in the empire of France.

On their several petitions, recorded in the Office of the Commissioners on the 31st day of December, 1861.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given, that the petition of

36. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, praying for Letters Patent for the invention of "Certain new and useful improvements in machinery for propelling water craft,"—a communication to him from abroad by Edward Sabine Renwick, a person resident at 335, Broadway, New York, in the United States of America,—was deposited and recorded in the Office of the Commissioners on the 4th day of January, 1862, and a complete specification accompanying such petition was at the same time filed in the said office

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Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 8th January*, 1862, *inclusive.*)

88. Frederick Versmann and Alphons Oppenheim, of Bury Court, St. Mary Axe, in the city of London, Analytical Chemists, for an invention of "Improvements in rendering fabrics and substances non-inflammable."—Dated 11th January, 1859.

95. Joseph Gibbons, of No. 345, Oxford Street, in the county of Middlesex, for an invention of "Improvements in fixing door and other knobs."—Dated 12th January, 1859.

126. John Dauglish, of Tunbridge Wells, M.D., for an invention of "Improvements in obtaining carbonic acid gas."—Dated 14th January, 1859.

198. Bernard Lauth, late of Pittsburgh, state of Pennsylvania, U.S.A., but now residing at Surrey Street, in the city of Westminster, Mechanician, for an invention of "An improved mode of and improved machinery for rolling plates, bars, rods, and shafts."—Dated 21st January, 1859.

7th January.

69. John Thomas Forster, of Holland Road, Kensington, in the county of Middlesex, Gentleman, for an invention of "Improvements in bed berths, applicable for bunks, hammocks, cots, and other fixed and moveable sleeping places."—Dated 8th January, 1859.

132. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "Improvements in the manufacture of cast steel."—Dated 15th January, 1859.

8th January.

141. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improvement in sewing machines."—A communication from Elias Howe, junior, of Brooklyn, in the United States of America.—Dated 17th January, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

(*8th January*, 1862.)

72. Alexander Robertson, of Upper Holloway, in the county of Middlesex, Engineer, for an invention of "A new manufacture of packages for dry goods."—Dated 11th January, 1855.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March „
268	„ April to June „
291	„ July to September „
321	„ October to December „
345	A.D. 1854—January to March „
371	„ April to June „
399	„ July to September „
424	„ October to December „
451	A.D. 1855—January to March „
475	„ April to June „
505	„ July to September „
527	„ October to December „
553	A.D. 1856—January to March „
579	„ April to June „
605	„ July to September „
632	„ October to December „
660	A.D. 1857—January to March „
684	„ April to June „
712	„ July to September „
737	„ October to December „
761	A.D. 1858—January to March „
789	„ April to June „
815	„ July to September „

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632	A.D. 1852—October to December inclusive
660	A.D. 1853—January to March „
684	„ April to June „
712	„ July to September „
737	„ October to December „
761	A.D. 1854—January to March „
789	„ April to June „
815	„ July to September „

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

FOREIGN PATENTS.



AUSTRIA.*

List of Patents which were Delivered, Prolonged, and became Void during the month of October, 1861.†

(*Communicated by the Austrian Government.*)

1. Patents delivered.

473. Anton Schäck, of Vienna, for "A new raw material, being a substitute for bristles in brushes."—1 year.—(Secret.)—Dated 3rd November, 1861.

474. Wilhelm Skallitzky, for "Manufacture of carpets of linen fabrics with coloured designs, called 'Sanitary carpets.'"—1 year.—(Secret.)—Dated 1st November, 1861.

475. Girolamo Dallo Pace, of Venice, for "Improvements in wicks of wax candles."—2 years.—(Secret.)—Dated 2nd November, 1861.

476. Simon Martii, of Vienna, for "Apparatus for the manufacture of sealing, colouring, and blank stamps."—1 year.—(Public.)—Dated 2nd November, 1861.

477. Ferdinand Piatnik, of Vienna, for "Manufacture of varnished playing cards that may be washed."—1 year.—(Public.)—Dated 2nd November, 1861.

478. August Tonnar, of Eupen, Prussia, represented by Dr. Ed. Pokorny, Vienna, for "A machine for drying and cleaning malt and other grain."—4 years.—(Secret.)—Dated 3rd November, 1861.—(Prussian Patent, 17th May, 1861.)

479. Michel Cinzek of Boziakovina, Croatia, for "Horse-shoes without nails."—1 year.—(Secret.)—Dated 3rd November, 1861.

480. Johann Smek, of Vienna, for "Hand carriages for the conveyance of carbonized liquids in peculiar ice-boxes."—1 year.—(Secret.)—Dated 3rd November, 1861.

481. F. A. Klusemann, of Sudenburg, near Magdeburg, Prussia, represented by O. E. Hörner, Vienna, for "A machine for washing animal charcoal for sugar works."—3 years.—(Secret.)—Dated 3rd November, 1861.—(Saxon Patent, 28th May, 1861.)

482. Joseph Stauffer, of Vienna, for "An apparatus for air-tight closets, &c."—1 year.—(Secret.)—Dated 3rd November, 1861.

483. Julius Oesterreicher, of Vienna, for "A machine with a glass drum for roasting coffee."—1 year.—(Public.)—Dated 6th November, 1861.

484. Nicolaus Menzello, of Triest, for "Bedsteads that may be lengthened and shortened at pleasure."—1 year.—(Secret.)—Dated 11th November, 1861.

485. Hermann Kohn, and jun., of Vienna, for "Improvements in inodorous apparatus of closets with a peculiar pump."—1 year.—(Secret.)—Dated 11th November, 1861.

486. Dr. Anton Salviati and Lorenz Radi, of Venice, for "Improvements in enamelling gold and silver."—3 years.—(Secret.)—Dated 12th November, 1861.

487. Dr. Anton Salviati and Lorenz Radi, of Venice, for "Improvements in his Patent composition of metal glass, called 'Combined chalcedony, quartz, and agate."—3 years.—(Secret.)—Dated 12th November, 1861.

488. Joseph Hattery, of Vienna, for "Scabbards that shorten when the sword is taken out."—1 year.—(Secret.)—Dated 12th November, 1861.

489. Georg Saylor Yull, of Kittsee, Hungary, for "An apparatus for the removal of straw in thrashing machines."—1 year.—(Secret.)—Dated 12th November, 1861.

490. Gustav Wagenmann, of Vienna, for "Improvements in the construction of lamps for burning mineral oil, whereby Argand oil lamps may be converted into lamps for mineral oil."—1 year.—(Public.)—Dated 12th November, 1861.

491. Christian Kemmler, of Vienna, for "A machine for sweeping streets."—1 year.—(Secret.)—Dated 12th November, 1861.

492. Ludwig Seyss, of Atzgersdorf, near Vienna, for "Improvements in telegraph bells."—1 year.—(Public.)—Dated 12th November, 1861.

493. Anton Eichleiter and Andreas Mechwart, of Ofen, for "A cast iron grate for canals."—1 year.—(Secret.)—Dated 13th November, 1861.

494. Julius Tittelbach, of Leipzig, represented by H. Dorigo, Vienna, for "A press for compressing the waste of coals and other fuel into fuel cakes."—2 years.—(Secret.)—Dated 12th November, 1861.—(Prussian Patent, 8th August, 1861.)

495. Carl Eckling and Joh. Hollub, of Vienna, for "Improvements in the construction of sewing machines."—1 year.—(Secret.)—Dated 15th November, 1861.

496. Ferdinand Ecker, of Vienna, for "A cosmetic for the face, called 'Kallo Krasin.'"—1 year.—(Secret.)—Dated 15th November, 1861.

497. Harmel, Brothers, of Paris, represented by Cornelius Kasper, Vienna, for "Improvements in the construction of machines for spinning worsted wool."—1 year.—(Secret.)—Dated 17th November, 1861.—(French Patent, 17th January, 1861.)

498. Anton Gschwandtner, of Linz, for "An apparatus for heating economical and machine hearths and boilers, according to the breadth of the flue."—1 year.—(Public.)—Dated 19th November, 1861.

* For the Austrian Patent Law, see No. 291 of this Journal.

† In the case of inventions patented in other states as well as in Austria, the Specifications (whether described as "public" or not) may in most cases be consulted, or translations of them be had, at the Library of the Commissioners' Office.

499. Alois Auer Von Welsbach, of Vienna, for "Manufacture of a new material for spinning and weaving."—3 years.—(Secret.)—Dated 23rd November, 1861.

500. Carl Jeschek, of Brunn, for "An elastic sealing press."—1 year.—(Secret.)—Dated 22nd November, 1861.

501. Johann Giergl, of Pesth, for "Peculiar playing cards, with advertisements."—1 year.—(Secret.)—Dated 23rd November, 1861.

502. Anton Wiesner, of Vienna, for "A peculiar composition for filtering and purifying liquids."—1 year.—(Secret.)—Dated 23rd November, 1861.

503. Eugen Vicenzi, of Modena, represented by Ed. A. Paget, of Vienna, for "Signal apparatus for preventing railway collisions."—2 years.—(Public.)—Dated 23rd November, 1861.

504. Alois Winkler, of Vienna, for "Manufacture of printed pictures in oil-colour or sheet-iron."—1 year.—(Secret.)—Dated 23rd November, 1861.

505. Pius Fink, of Vienna, for "Improvements in the manufacture of spiral springs."—1 year.—(Public.)—Dated 23rd November, 1861.

506. August Köstling and Anton Bating, of Vienna, for "A peculiar superstructure of railways from wood."—1 year.—(Public)—Dated 23rd November, 1861.

507. Philipp Spiller, of Posen, Prussia, represented by Jos. Hübner, of Dillersbach, near Friedland, Bohemia, for "A smoke-consuming economical stove without a valve."—5 years.—(Secret.)—Dated 23rd November, 1861.

508. Leopold Sellari, Anton Malavasi, and Ludwig Ardioli, of Mantua, for "A new composition for fixing gutta percha soles on leather soles."—2 years.—(Secret.)—Dated 27th November, 1861.

509. Martin Waldherr, Joseph Martinek and Joseph Barta, of Vienna, for "Inodorous waterclosets."—1 year.—(Secret.)—Dated 27th November, 1861.

510. Bernhard Nattland, of Adamsthal, Moravia, for "New fly-wheels."—1 year.—(Secret. Dated 27th November, 1861.

511. Franz Wilhelm, of Neunkirchen, for "An apparatus for refining cyder."—1 year.—(Secret.)—Dated 27th November, 1861.

512. Franz Wilhelm, of Neunkirchen, for "An apparatus for the manufacture of vinegar from cyder."—1 year.—(Secret.)—Dated 27th November, 1861.

513. Ernst. Fr. Anthon, of Prague, for "Converting common salt into glauber salt."—1 year—(Secret.)—Dated 25th November, 1861.

514. Koppelmann Gutkind, of Prague, for "A varnish blacking of cocoa nut oil."—1 year.—(Secret.)—Dated 26th November, 1861.

515. August Voigt, of Weisskirchlitz, Bohemia, for "Improvements in oil-cloth."—2 years. (Public.)—Dated 28th November, 1861.

16. Simon Turnovszky, of Munich, represented by Joseph Anton Von Sonnenthal, of Vienna, for "A peculiar writing apparatus for shaking hands."—1 year.—(Secret.)—Dated 28th November, 1861.

2. Prolonged Patents.

395. Ulrich Kander, for "Improvements in taps."—2nd year.—(Secret.)—Dated 15th October, 1860.

396. Jacob Schwarz, for "Improvements in black and coloured lithographs."—2nd year.—(Secret.)—Dated 17th October, 1860.

397. Joseph Zeiller, for "An apparatus for dissolving and preserving isinglass."—2nd year.—(Secret.)—Dated 20th October, 1860.

398. Gottlieb L. Meyer, for "Improvements in iron economical kitchen ranges."—3rd year.—(Secret.)—Dated 20th October, 1859.

399. Ferd. Neiber, for "Improvements in the manufacture of fancy articles combined with stones, their imitation, and metal ornaments."—2nd year.—(Secret.)—Dated 29th October, 1860.

400. Alois Edelmann, for "Manufacture of carpets from selvage."—9th year.—(Secret.)—Dated 6th November, 1853.

401. Fr. Jonasch, for "An apparatus called 'Irisated case.'"—7th year.—(Public.)—Dated 3rd November, 1855.

402. Johann Peter Klein and Wilhelm Zipser, for "A machine for teaseling cloth."—6th year.—(Secret.)—Dated 18th November, 1856.

403. Joseph Von Gal, for "Improvements in staves of casks."—6th year.—(Public.)—Dated 22nd October, 1856.

404. Joseph Hörmer, for "An apparatus for washing and mangling."—6th year.—(Secret.)—Dated 25th October, 1856.

405. Paul Traugote Meissner, for "Heating apparatus for carriages, &c."—6th year.—(Secret.)—Dated 16th November, 1856.

406. Maria Polin, for "Improvements in the manufacture of felt and silk hats."—4th and 5th years.—(Secret.)—Dated 27th November, 1857.

407. Alois Schubert, for "Manufacture of plastic figures, pictures, animals, &c."—4th year.—(Secret.)—Dated 22nd October, 1858.

408. Fr. Biswanger, for "A tubular stove."—3rd and 4th years.—(Secret.)—Dated 16th January, 1860.

409. Math. Aug. Koch, for "Improvements in a composition for preventing and destroying incrustations of boilers."—2nd year.—(Secret.)—Dated 27th October, 1860.

410. J. L. Arnstein and Elise Schwal, for "Manufacture of twilled buttons and tassels on common circular looms."—2nd year.—(Secret.)—Dated 28th October, 1860.

411. M. Zois Von Edelstein, for "Improvements in the manufacture of cut wooden nails."—2nd year.—(Secret.)—Dated 1st November, 1860.

412. Ad. Stokar, for "Improvements in windlasses."—2nd year.—(Secret.)—Dated 25th October, 1860.

413. Fr. Max. Bode, for "A pocket light box."—2nd year.—(Public.)—Dated 5th November, 1860.

414. Leopold Köppel, for "Improvements in universal telegraphs for advertisements."—11th year.—(Public.)—Dated 23rd October, 1851.

415. Joh. Haas, for "An apparatus for rendering doors and windows air and water-tight."—10th year.—(Secret.)—Dated 24th October, 1852.

416. V. Thumb, for "A mechanical tender with an eccentric for weaving." — 6 years. — (Secret.) — Dated 16th November, 1856.

417. Alf. Lenz, for "A powder for removing and preventing incrustations of boilers." — 3rd year. — (Secret.)—Dated 10th November, 1859.

418. Carl Fischer, for "Manufacture of matches without phosphor."—3rd year.—(Secret.)—Dated 3rd November, 1859.

419. Fr. Bozek, for "Improvements in circular segment mangles."—9th year.—(Public.)—Dated 5th January, 1854.

420. H. G. Möhring, for "Improvements in steam pumps."—5th year.—(Public.) — Dated 24th November, 1857.

421. Carl Wessely, for "A self-acting apparatus for lubricating horizontal axles." — 3rd year.—(Secret.)—Dated 13th November, 1859.

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3. Patents which have become void.*

609. Alex. Beschorner, for "An iron bedstead that may be put to pieces."—Dated 31st May, 1855; expired 31st May, 1861.

610. Jos. Schulhof, M. Perles, and F. Chrismar, for "Metal fly-wheels of one piece."—Dated 3rd May, 1856; expired 3rd May, 1861.

611. F. Meray, for "Improvements in the construction and arrangement of all kinds of stoves."—Dated 4th May, 1856; expired 4th May, 1861.

612. J. B. Paganini, for "Improvements in the construction of steam boats for increasing their speed."—Dated 9th May, 1856; expired 9th May, 1861.

613. A. A. Olivier, for "Improvements in winding off raw silk."—Dated 11th May, 1856; expired 11th May, 1861.

614. J. W. Bracht and Zeillner Von Zeillenthal, for "Improvements in printing warps and skeins."—Dated 12th May, 1856; expired 12th May, 1861.

615. Hugo Lendecke, for "Improvements in kilns for reviving animal charcoal in sugar works."—Dated 12th May, 1856; expired 12th May, 1861.

616. J. Urfus, for "Improvements in the manufacture of mineral manure."—Dated 12th May, 1856; expired 12th May, 1861.

617. J. Urfus, for "Economical mineral manure."—Dated 13th May, 1856; expired 13th May, 1861.

618. C. G. Müller, for "Extracting ammonia and acetic acid from the tar water of distilled brown coal."—Dated 14th May, 1856; expired 14th May, 1861.

619. Th. Wiede and E. Pressprich, for "A horizontal fulling mill with a rotary apparatus for teaseling cloth and woollen fabrics."—Dated 14th May, 1856; expired 14th May, 1861.

620. G. Magri, for "An apparatus for husking and cleaning rice."—Dated 15th May, 1856; expired 15th May, 1861.

621. Fr. Fr. Kukla and Fr. Ram, for "A steam heating apparatus." — Dated 4th May, 1858; expired 4th May, 1861.

622. D. Wambera, for "A machine for the manufacture of tinsels."—Dated 10th May, 1858; expired 10th May, 1861.

623. Fr. Kuhlmann, for "Manufacture of chloride of barium."—Dated 15th May, 1858; expired 15th May, 1861.

624. J. J. Huber, for "Jewelry articles with moveable parts."—Dated 23rd May, 1858; expired 23rd May, 1861.

625. Ad. Hetsey, for "Improvements in a powder for washing wool and cleaning fabrics for furniture and other stuffs."—Dated 25th May, 1858; expired 25th May, 1861.

626. S. Krauss and G. R. Lackenbacher, for "A machine for taking the measure of ladies' foot coverings."—Dated 30th May, 1858; expired 30th May, 1861.

627. Joh. Schumann, for "Manufacture of white stone bricks."—Dated 30th May, 1858; expired 30th May, 1861.

628. A. B. Heller and O. Graf, for "A substance for grinding and polishing obtained from the slags of silver works."—Dated 3rd May, 1859; expired 3rd May, 1861.

629. Fr. Paget, for "Improvements in refining sugar."—Dated 7th May, 1859; expired 7th May, 1861.

630. J. Szentsak, for "Air-tight double windows."—Dated 7th May, 1859; expired 7th May, 1861.

631. J. Heszer, for "Spring fastenings of buttons."—Dated 18th May, 1859; expired 18th May, 1861.

632. L. C. Siemens and E. Breunlin, for "A means of refining beetroot-juice."—Dated 24th May, 1859; expired 24th May, 1861.

633. Fr. Weiss, for "An essence called 'Eau de Prague.'"—Dated 25th May, 1859; expired 25th May, 1861.

634. St. Jaschka, for "Improvements in mangles."—Dated 27th May, 1859; expired 27th May, 1861.

635. J. Ch. Endris, for "Improvements in locks."—Dated 27th May, 1859; expired 27th May, 1861.

636. Eug. Bargiel, for "Enamelled pipes for closets."—Dated 1st May, 1860; expired 1st May, 1861.

* The Specifications of these Patents may be consulted in the original language, or translations be had at the Public Free Library.

637. J. Meidinger, for "Restoring old railway sleepers."—Dated 3rd May, 1860; expired 3rd May, 1861.

638. W. Scheunemann, for "Improvements in conical balls."—Dated 3rd May, 1860; expired 3rd May, 1861.

639. J. Holledерer, for "Improvements in fire-engines."—Dated 9th May, 1860; expired 9th May, 1861.

640. J. Bachrach, for "Improvements in copying presses."—Dated 10th May, 1860; expired 10th May, 1861.

641. J. Hilscher, for "An apparatus in lathes for working objects at right angles."—Dated 12th May, 1860; expired 12th May, 1861.

642. S. Kaschke, for "A coffee machine."—Dated 12th May, 1860; expired 12th May, 1861.

643. J. Ludold, for "A safety puzzle lock."—Dated 12th May, 1860; expired 12th May, 1861.

644. J. Rada, for "Improvements in planes for the manufacture of wooden pins."—Dated 14th May, 1860; expired 14th May, 1861.

645. C. Landtmann, for "Improvements in the manufacture of horn buttons."—Dated 15th May, 1860; expired 15th May, 1861.

646. D. W. Beck, for "A process for impregnating timber."—Dated 15th May, 1860; expired 15th May, 1861.

647. Fr. M. Thym, for "A tincture for promoting the growth of hair."—Dated 17th May, 1860; expired 17th May, 1861.

648. C. König, for "A process for disacidifying and discolouring yeast, and compressing the same."—Dated 20th May, 1860; expired 20th May, 1861.

649. C. Kragl, for "Improvements in the manufacture of wadding."—Dated 20th May, 1860; expired 20th May, 1861.

650. L. Deutsch, for "Improvements in lithography."—Dated 22nd May, 1860; expired 22nd May, 1861.

651. H. Tempele, for "Improvements in distilling and refining apparatus."—Dated 10th May, 1857; expired 10th May, 1861.

652. A. Schöller, for "Improvements in the manufacture of felt cloth for various purposes."—Dated 21st May, 1857; expired 21st May, 1861.

653. J. Banch, for "Improvements in preparing cotton tissues for dyeing and printing."—Dated 27th May, 1857; expired 27th May, 1861.

654. Fr. A. Pauli, for "Improvements in the construction of iron bridges."—Dated 28th May, 1857; expired 28th May, 1861.

655. H. Breton, for "New means and processes for clarifying spirits and alcohol, and removing the fusel therefrom'"—Dated 29th May, 1861; expired 29th May, 1861.

656. M. A. Spitzer, for "Manufacture of cotton chenille fabrics."—Dated 10th April, 1859; annulled 12th November, 1861, for want of novelty.

657. H. Ehrenfeld, for "Improvements in bleaching starch."—Dated 20th October, 1858; annulled 20th October, 1861, for want of novelty.



SAXONY.*

List of Patents Delivered between the 1st April and 30th September, 1861.†

(*Communicated by the Saxon Government.*)

(For preceding List, see No. 765 of this Journal.)

1. Heinrich Häfner, of Chemnitz, for "A doubling and twisting machine for obtaining conical cops used in the manufacture of hosiery, cloth, and cotton."—5 years.—Dated 20th June, 1861.

2. Couillard-Fautrel, Sons and Nephews, of Paris, represented by H. Böhme, Dresden, for "Improvements in the manufacture of artificial fuel."—5 years.—Dated 19th June, 1861.

3. Chonippe, of Paris, represented by A. Ostertag, Dresden, for "Improvements in the microscope."—5 years.—Dated 2nd July, 1861.

4. Vautier, of Charenton-le-Pont, near Paris, represented by H. Böhme, Dresden, for "Obtaining textile fibrous substances from the bark and leaves of mulberry trees and other plants."—5 years.—Dated 15th July, 1861.

5. Ernst Gessner, of Aue, for "Improvements in cards for preparing textile substances."—5, years.—Dated 11th May, 1861.

6. Karl Weniger, of Vienna, for "A universa lamp for households."—5 years.—Dated 20th June 1861.

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* For the Saxon Patent Law, see No. 236 of this Journal.

† All the published Specifications are deposited in the free Library of the Commissioners of Patents, where translations of the same may be had.

7. Berthold Schäffer and Karl Gustav Walcker, of Berlin, for "Modifications in apparatus for the manufacture of lighting gas."—5 years.—Dated 2nd July, 1861.

8. Karl Hupp, of Dusseldorf, for "School boards of metal, wood, and pasteboard."—5 years.—Dated 9th July, 1861.

9. Puistienne, of Paris, represented by H. Böhme, Dresden, for "A process for obtaining copper from ores, and especially from copper pyrites."—5 years.—Dated 9th July, 1861.

10. Richard Hartmann, of Chemnitz, for "A devilling machine and feeding apparatus applicable to cards for any fibrous substance."—5 years.—Dated 10th July, 1861.

11. Hösel and Co., of Chemnitz, for "A Jacquart machine with a double lift."—5 years.—Dated 15th July, 1861.

12. Johann Carl Friedrich Hecht, jun., of Hohenstein, for "A distilling apparatus."—5 years.—Dated 16th July, 1861.

13. Heinrich Menke, of Hamburg, for Grover and Baker, of New York, represented by Schubart and Hesse, Dresden, for "Improvements in sewing machines."—5 years.—Dated 18th July, 1861.

14. Oscar Gräf, of Bernburg, for "A cylinder hoe."—5 years.—Dated 18th July, 1861.

15. Harmel, Brothers, of Paris, represented by H. Böhme, Dresden, for "Improvements in machines for spinning worsted wool."—5 years.—Dated 23rd July, 1851.

16. Lewis Hohl, of Annaberg, for "A bobbin for twisting chenille."—5 years.—Dated 18th July, 1861.

17. Julius Wallnau, of Dresden, for "A safety apparatus for stopping fiery horses."—5 years.—Dated 13th July, 1861.

18. Louis Zeschke, of Asch, for "Improvements in right and left oscillating belt-saws."—5 years.—Dated 18th July, 1861.

19. Mathews, of Montreal, represented by J. H. F. Prillwitz, Berlin, for "A substance for the manufacture of ink for engraving, printing, and lithographing."—5 years.—Dated 23rd July, 1861.

20. August Heinrich Löwe, of Pegau, for "A distilling apparatus."—5 years.—Dated 16th July, 1861.

21. Wilhelm Philippi, of Stromberg, near Bingenbrück, for "A composition for filling up the boxes of journals."—5 years.—Dated 23rd July, 1861.

22. Georg Gressmann, of Zella, near Gotha, for "A breech-loading percussion gun."—5 years—Dated 18th July, 1861.



UNITED STATES OF AMERICA.

(Communicated by the Commissioner of Patents.)

List of Patents, with claims annexed, issued from the United States Patent Office, for the week ending 17th December, 1861, and each bearing that date.

No. 2920. W. S. G. Baker, of Baltimore, Md., for an "Improved camp bed."

"I claim the jointed frame work *w*, *w*, in combination with the jointed lower pieces *r*, *r*, so constructed as to form frames for an upper and lower bed, which are supported by a hinged diagonal brace in such a manner that the lower frame can be disconnected, and the whole folded up together as and for the purpose specified."

No. 2921. Benjamin G. Barney, of Philadelphia, Pa., for an "Improvement in fastenings for shoulder-straps."

"I claim the projecting lips *e* and e^1, on the under side of the shoulder strap A, in combination with the strips D and D^1, attached to the shoulder of the coat, the whole constructed and arranged substantially as set forth, for the ready attachment of the strap to, and its ready detachment from, the coat in the manner specified."

No. 2922. J. H. H. Bennett, of Hunts Hollow, N.Y., for an "Improved hotel annunciator."

"I claim the arrangement of the plates *e*, slide C, having the plate D, attached, which is provided with a pin *d*, and connected with the drum E, or other spring, the slide L of the knob M, the bell I, and the slides F, substantially as and for the purpose set forth."

No. 2923. David Denham, of Virden, Ill., for an "Improved portable field fence."

"I claim the combination of the horizontal rails A, cross-pieces B, oblique braces C, projecting ends *a*, *a*, supports D, E, E^1, mortises 1, gains 2, and keys F, all constructed, arranged, and employed in the manner and for the purposes herein-before specified."

No. 2924. J. H. Dennis, of Louisville, Ky., for an "Improved mode of collecting fares on street railroad cars."

"I claim the combination of the platformless rear with a door for exit only, the entrance platform and door in front, the strap C, and fare box E, all as herein-before explained and for the purposes set forth."

No. 2925. Watson Duchemin, of Charlotte Town, Prince Edwards Island, for an "Improved hoisting block."

"I claim a hoisting block having a loose metal ring C (which takes the place of the sheave) in combination with the central bearing *e*, and the friction rolls *m*, operating substantially, as specified."

No. 2926. R. N. Eagle, of United States Army, for an "Improvement in stirrups and their covers."

"I claim, 1st, the locating of the point of suspension inside or towards the horse from a vertical line which is drawn from near the centre of and at right angles to the tread of the stirrup, substantially as set forth. 2nd, in making this inclination adjustable by the hub or its equivalent so as to suit the different circumstances under which it may be used or the conformation of the user, substantially as described. 3rd, the peculiar angular construction of the eye and hub combined and the manner of their attachment to the body of the

stirrup so as to impart to the tread of said stirrup an angular position horizontally, and also with reference to the body of the horse, thus allowing an easy entrance to the foot without twisting the stirrup leather, and causing at the same time the foot to move in the proper direction, substantially as set forth. 4th, hanging the stirrup upon the horizontal or nearly horizontal axis which passes angularly over the tread in the direction of a line drawn horizontally from the little toe to the instep, substantially as set forth. 5th, constructing the sides or arms of a stirrup in a spiral form with the inner side or arm shorter than the outer side or arm so as to compel the toes and foot of the rider to turn inward towards the body of the horse, substantially as described. 6th, constructing the tread or marginal base of the stirrup with an irregular concavity in order to conform to the bend of the foot or boot and with the front of said marginal base of the tread higher relatively than the base at the entrance of the stirrup as and for the purposes described. 7th, the cover of the stirrup as described, said cover being made of one piece, the lower portion being turned inward from the bottom to cover the tread and lower part of sides thus forming a guard and protection for the foot, substantially as set forth."

No. 2927. R. S. Eddy and A. O. Miles, of Nashau, N.H., for an "Improvement in locks."

"We claim the combination of the tumblers D, frames *c*, *g*, and slotted and notched slides *d*, *e*, *f*, when constructed, arranged, and operating in connection with a bolt B, *a**, and key E, *h*, *j*, all as herein-before shown and described, and for the purposes explained."

No. 2928. Wm. H. Elliot, of Plattsburgh, N.Y., for an "Improvement in the base pin and rammer of revolving pistols."

"I claim, 1st, so constructing and arranging the base pin *e* and lever *d*, in relation to each other and to the barrel that the base pin may be drawn out in front without first displacing the lever or any portion of the frame when these devices are employed with a hammer, which is located in the centre of the frame in the rear of the cylinder, as herein set forth. 2d, providing a groove *u* in lever *d*, so as to afford space for the reception of the base pin *e*, as it is passed forward out of the cylinder, as and for the purpose herein specified. 3rd, cutting away the projecting portions of the head of the base pin as represented at *v*, *v*, when the base pin so formed is employed with a grooved lever *d*, as and for the purpose set forth."

No. 2929. Philo S. Felter, of Cincinnatus, N.Y., for an "Improvement in guard attachment for locks."

"I claim the bar or guard D, provided with the recess *a* in connection with the notched disks G, spring F, provided with the projections *b*, *d*, *d*, and the key H, arranged substantially as and for the purpose herein set forth."

No. 2930. Joseph W. Ellis, M.D., of Augusta, Maine, for an "Improvement in tent ventilator."

"I claim suspending the open upper end of the tapering body A, of my improved tent to a shoulder near the upper end of the tent-pole D, by means of the perforated collar *g*, and the ropes *p*, *p*, but this I only claim when the expanded and conical shaped tent-cap C, is used for the purpose of closing the open upper end of the said body of the tent and when the shoulder upon the pole D, is located in such a position that the upper end of said pole will support the said tent-cap (C), in substantially the same relative position as is represented in the accompanying drawings. I also claim passing the tent-cap guy-ropes *h*, *h*, through a series of eyelet holes in the upper portion of the body of the tent to the belaying buttons *l*, *l*, that are secured to the sides of the tent pole D, for the purpose of enabling the said tent-cap to be confined in any desired position for the purposes herein set forth."

No. 2931. M. A. Finnell, M.D., of New York, N.Y., for an "Improvement in thermometers."

"I claim the employment of card, Bristol, or paste board, as the material for printed thermometer scales, as and for the purposes set forth. I claim securing the tube to such scales by cementation, as set forth. I claim in combination with tubes thus secured the bend near the bulb, as set forth. Finally, I claim in combination with said printed thermometer scales the above described method of adapting the thermometer tubes to their appropriate ranges of indication."

No. 2932. Elisha Fitzgerald, of New York, N.Y., for an "Improvement in pumps."

"I claim in combination with the division pump A, B, C, using for the pump D the two valves E and G, as described and for the purposes set forth."

No. 2933. H. C. Foote, of Jersey City, N.J., for an "Improved portable farm fence."

"I claim the manner substantially as herein described of constructing the panels of an open farm fence, whereby the panels can be doubled at will, so as to form closed frames with a rain proof lap surface, for the purposes herein set forth."

No. 2934. N. S. Gilbert, of Lockport, N.Y., for an "Improved preserve jar."

"I claim the combination of the bail D with its wedge-like projections *b*, *b*, the stopper A, with its elliptical button, and the mouth of the jar, as specified, the whole being arranged and used as and for the purpose set forth."

No. 2935. Stephen R. Going, of Brooklyn, N.Y., for an "Improvement in skates."

"I claim, 1st, supporting the hollow of the foot by fitting the stock A to the shape of the boot or shoe, as set forth. 2nd, attaching a plate or spring G to the stock A to answer the purposes described. 3rd, joining straps C and D at E in combination with bed plate A, as set forth."

No. 2936. Wm. O. Grover, of Boston, Mass., for an "Improvement in sewing machines."

"I claim the combination of two eyes with an edge piece and a fork operating on the thread on the down stroke of the needle, the whole constituting a contrivance operating substantially in the manner herein-before set forth, and performing the offices specified."

No. 2937. T. C. Hargraves, of Schenectady, N.Y., for an "Improvement in the cutting apparatus of harvesters."

"I claim the combination of the two reciprocating toothed cutters A, A^1, recessed fingers C, *c*, set screws *f*, *f*, guard *g*, and plate *h*, all constructed, arranged, and operating in the manner and for the purposes herein shown and explained."

No. 2938. J. V. Harter, of Plymouth, Ill., for an "Improved evaporating pan for saccharine juices."

"I claim the follower D, provided with friction rollers *c*, *d*, springs *f*, *g*, shoe *e*, and covering *j*, with pan A and flanges *a*, *b*, when combined, arranged, and operating in the manner and for the purpose described."

No. 2939. Harvey L. Hopkins, of Lebanon, N.Y., for an "Improvement in harvesters."

"I claim, first, combining with the frame of a harvester a finger bar, which may be turned horizontally upon its pivoted connection from one side of the frame to the opposite side, substantially as described. Second, combining with said finger bar an elevating and supporting apparatus, so arranged as to perform the same service whether the finger bar projects to the right or left of the main frame, substantially as represented and described. Third, in combination with a finger bar having its connection with the frame of the machine, substantially as described, a hinged driver's seat, and a reversible tongue co-operating together, whereby the machine may at pleasure be drawn in either direction substantially as described."

No. 2940. Obadiah Hopkins, of New York, N.Y., for an "Improvement in mounting and manœuvering cannon."

"I claim mounting two guns and their carriages upon a balanced frame, so constructed and arranged that they may alternately be elevated and depressed above and below a parapet, and brought into a safe position to be loaded and discharged, in the manner herein specified and for the purposes set forth."

No. 2941. Daniel Hughes, of Rochester, N.Y., for an "Improvement in lamps."

"I claim the air chamber between the conductor and the body of the lamp, as herein recited, the gauze covered holes or small perforations as the inlets for the air, and the globe-shade as they are arranged in relation to each other, and for the purposes herein set forth."

No. 2942. Chas W. Irwin, of St. Louis, Mo., for an "Improved camp chest."

"I claim the arrangement of the grooved cleats on the bottom of the chest, and the compartments and sub-compartments in the inside thereof, the whole in respect to each other, substantially as and for the purpose set forth."

No. 2943. Charles Kaiser, of New York, N. Y., for an "Improvement in machines for polishing the eyes of needles."

"I claim, 1st, arranging the wires upon which the needles are strung, upon a frame to which may be imparted either revolving or reciprocating motion, in such manner that the needles will be forced by gravitation to slide longitudinally upon said wires, substantially as described. 2nd, in combination with the foregoing, I claim by the interposition of suitable mechanical obstruction, arresting the needles in their attempted revolution around the wire and retaining them for a portion of the time with their long ends upwards, in order that during such period of time, that side of the eye of the needle which is nearest the long end may by coming in contact with the wire, and having the weight of the needle superimposed upon it, be polished equally with the other side of the eye, substantially as described."

No. 2944. John L. Lairdieson, of Troy, N. Y., for an "Apparatus for varnishing loom heddles."

"I claim, 1st, the employment for applying the varnish in the varnishing of heddles, of a pair of rolls operating on opposite sides of the heddles to roll the varnish into the threads, substantially as herein specified. 2nd, the employment in combination with the varnishing rolls, of a system of reciprocating brushes operating on opposite sides of the heddles, substantially as herein specified. 3rd, the employment in combination with the rollers *a*, *a*, and blocks *p*, or other equivalent supports, of a pair of eccentric clamps N, N, and a hook P, applied to operate in combination with each other upon the frames B, and connecting hooks of the heddle rails, substantially as herein set forth. 4th, combining the upper roller E^1 with the brush operating mechanism in such manner that the said roller may have a rotary motion imparted to it when the brushes are in operation substantially as herein described. 5th, the arrangement of the varnish rollers, the reciprocating brushes and their operating mechanism and the rollers *a*, *a*, or equivalent horizontal supports for the heddle frames, substantially as herein specified."

No. 2945. Marcus Lane, of Washington, D. C., for an "Improvement in process of making iron and steel."

"First, I claim broadly the simultaneous application of agents other than decarbonizing agents for the purpose of refining and carbonizing metals, which shall act smultaneously, not only to carry off the impurities in the metal in the condition of gases, but also the impurities of the metal in the condition of slag. Second, I claim broadly the simultaneous use of a carboniizing and decarbonizing agent in treating fused metals, which shall act to delay the final decarbonization of the metal, to a time at which the impurities shall have been removed by the agents employed. Third, I claim the introduction of carbon at a point above the surface of a mass of fused metal, while the metal is in rotary motion. Fourth, I claim the introduction of the gases from a refining furnace, into the stack of a smelting-furnace, in such position and in an inflamed state, as to assist in fusing the ore by being passed into the smelting-furnace in immediate contact with the ore. Fifth, I claim causing the gases evolved from the fused metal, and which have accumulated in the refining chamber, to be forced into and among the fusing metal in the smelting-furnace. Sixth, I claim the introduction of carbonate of soda, and the alkalies, at a point below the surface of the fused metal in a refining chamber, while the metal is in a rotary motion."

No. 2946. Wm. Lighthall, of New York, N. Y., for an "Improved method of setting tubes for condensers."

"I claim the use of the packing ring C, constructed and applied as described, in combination with the tube D, and head sheet A, as and for the purpose set forth."

No. 2947. Wm. A. Lighthall, of New York, N.Y., for an "Improvement in condensers for steam engines."

"I claim the use of a combined jet and surfaced condenser constructed and operated substantially as herein set forth and for the purpose described."

No. 2948. Wm. A. Lighthall, of New York, N.Y., for an "Improved steam condenser."

"I claim the combination of the drip plate J, drip reservoir K, tubes E, and division plates G, with the case A, arranged and operated as and for the purpose set forth."

No. 2949. Henry Lowe, of Baltimore, Md., for an "Improvement in process of recovering soda used in the manufacture of paper stock."

"I claim reclaiming the soda from the spent solution of caustic soda after its action upon reeds, straw, or other fibrous material, by charging the solution with carbonic acid gas in a suitable vessel, so that the organic matter will be precipitated."

No. 2950. Archibald McGuffie, of Rochester, N.Y., for an "Improvement in construction of bridges."

"I claim the combination of the angular tenoned heads *b*, with the tubular arched section *a*, in the manner herein shown and described. The arrangement with the heads *b*, and sections *a*, of the rods *e*, forked rods C, sleepers D, bars F, rods G, *g*, H, and bars I, as herein shown and described."

No. 2951. Joshua Merrill, of Boston, Mass., for an "Improvement in constructing stills and still bottoms."

"I claim the formed seamless steel still bottom, in combination with the body of a still, substantially as described."

No. 2952. Lewis and Jacob Miller, of Canton, Ohio, for an "Improvement in grain cleaners."

"We claim, 1st, suspending the shoe of a grain cleaning machine to the frame, by means of straps that are hinged at one of their ends, and having a springing motion at the other end thereof, for producing a regular but noiseless motion to the shoe, substantially as described. We also claim in combination with a shoe suspended by straps that are hinged at one end, and have a spring motion at the other end, a spring pitman for vibrating said shoe without sudden jar or noise, substantially as described. We also claim the adjustable wind board K, L, the latter having a lip or flange *e*, constructed and operated substantially as herein described and for the purpose set forth. We also claim hanging the front of the riddle in adjustable bearings, so that it may be moved to or from the grain directing board N, for the purpose of regulating the blast with regard to that end of the riddle, substantially as described."

No. 2953. James Millholland, of Reading, Pa., for an "Improved mode of operating Giffard's injector."

"I claim operating the perforated tube and internal rod of a Giffard injector, by levers N and M, arranged substantially as described, the said levers being provided with the appliances herein described, or their equivalent, so that they can be operated together or independently of each other, as set forth."

No. 2954. G. W. Moffitt, of Washington, Pa., for an "Improvement in car coupling."

"I claim the application of a wrought iron link (A), a hook or catch (B), and an abutment (F), with a drop piece (f^{11}), to a buffing draw head of a car, so that when two cars to which the same are respectively applied are run into contact with each other, for the purpose of being coupled, the link of either will interlock with the catch or hook of the other, and thus complete a reliable connection of the said cars, the same being constructed and arranged together to operate substantially in the manner described."

No. 2955. R. B. Pullan, of Cumminsville, Ohio, for an "Improvement in tents."

"I claim so constructing the centre joint in combination with the folding thighs and legs as to produce three different forms of tent, all as described and represented. I also claim the double parallel coverings H and I, when the ventilating space between them is made with a free and unobstructed egress at the top, as described and represented. But I disclaim all modes of ventilating the space between the inner and outer tent, where the current is taken through hollow ventilating tent-poles, and all other modes of ventilating such double tents, except where the upper part of said passage is left open, free, and unobstructed as set forth."

No. 2956. Henry W. Putnam, of Cleveland, Ohio, for an "Improved clothes wringer."

"I claim the herein described side pieces B, B^1, H, constructed as specified, in combination with the cross bar M, ratchet *c*, and cams D, arranged and operating as and for the purpose set forth."

No. 2957. Ferdinand Rochow, of New York, N.Y., for an "Improvement in rotary pumps."

"I claim, 1st, constructing the enclosing shell or case A, of an eccentric or irregular curve, such that all lines drawn from its opposite sides and through any one and the same point (O^1) in the axis or diameter of such curve, but at one side of the centre of such axis, shall be of equal length, so that abutments or pistons (v, v) of the same length with such axis or diameter, revolving in such shell and passing through a shaft or cylinder having the centre of its axle in such point (O^1), will always be in contact with the sides of the shell without the use of any device to vary their length. 2nd, the combination of the shell or case A, when so constructed with the enclosed shaft or cylinder R, and its movable solid pistons b, b, arranged in respect to such shell, substantially as described. 3rd, the application and use of the packing rings p^1, p^1, and elastic packing q, q, in combination with the shaft R, and side pieces S, S, substantially as and for the purposes set forth. 4th, the whole machine or apparatus, constructed substantially as and for the purposes set forth."

No. 2958. Wm. G. Schmidlin and Jeremiah Driscoll, of N.Y., for an "Improvement in reflectors for lamps."

"We claim the employment of the reflectors d and e, formed as sections of truncated cones or pyramids and flaring away from the flame, substantially as and for the purposes specified."

No. 2959. W. A. Shannon, of Washington, D.C., for an "Improvement in fire escape ladders."

"What I claim, an improvement in the construction of a sectional ladder with arms or braces (Fig. 2, E, E), working freely on the rounds and gravitating to their position after the ladder has been passed freely and unobstructedly through the window, and the side braces (Fig. I, K, K), which are designed to prevent the ladder from being pressed into the lower windows."

No. 2960. William A. Shaw, of Boston, Mass., for an "Improved bottle stopper."

"I claim a hollow elastic stopper, operating in the manner substantially herein described."

No. 2961. Wm. J. Stillman, U.S. Consul at Rome, Italy, for an "Improvement in rifle sights."

"I claim, 1st, the employment in rifled or other fire-arms of a reflecting sight C, so constructed and arranged as to reflect in the line of sight light from a given direction only, substantially as and for the purpose herein set forth. 2nd, I also claim, in combination with a reflecting surface C, an adjustable covering or protector B, D, so arranged as to admit of being opened or closed at pleasure, for the purpose above specified."

No. 2962. A. Stoler and S. A. Sisson, of Bristol, Pa., for an "Improvement in cutting apparatus for harvesters."

"I claim the bolt D, when formed with a square shank and conical head, whether with or without the steadying pin at its base, as shown by us in the above, when used in combination with the finger bar and cutter, in the manner and for the purpose specified."

No. 2963. John Trageser, of New York, N.Y., for an "Improvement in beer coolers."

"I claim, 1st, a strainer for a wort or beer cooler formed of a tube A, perforated at its upper part, as shown at a, and used with or without the perforations b, substantially as and for the purpose set forth. 2nd, providing the vessel B, in which the tubular strainer A is placed with narrow boxes C, C, one or more at its bottom; the boxes having notched edges, and arranged in relation with the upper cooling tube D, to operate as and for the purpose herein specified. 3rd, having the bottom of the vessel B perforated with two rows of holes d, d, when said perforations are used in connection with the boxes C, C, for the purpose set forth. 4th, the combination of the tubular strainer A, vessel B, with its perforated bottom, the boxes C, C, attached to the under side of the bottom of B, and notched as shown, and the cooling tubes D, all arranged as and for the purpose specified."

No. 2964. O. M. Truair, of Mount Morris, N.Y., for an "Improved machine for sizing broom corn."

"The bed A, receptacles J, J, rollers E, E^1, bands F, F, and slats b, furnished with projections, with the inclined board d, and knife e, when combined, arranged, and operating in the manner substantially as described."

No. 2965. James Turner, of Chicago, Ill., for an "Improved process of rendering lard and tallow."

"I claim, 1st, drawing off the fat as fast as it is rendered by the pressure of steam in the tank. 2nd, the process herein described of drawing off the fat as fast as rendered by the use of a steam tight tank, in combination with a strainer or float and movable or flexible pipe, substantially as set forth. 3rd, the mode of delivering the melted fat by the pressure of the steam in the tank to any part of the building, substantially as set forth."

No. 2966. Frederick Yeiser, of Danville, Ky., for an "Improvement in meridian instruments."

"I claim in combination with the bar G, and plates J, J^1, the bar D, and disk C, operated substantially in the manner and for the purposes set forth."

No. 2967. J. F. Brown, of New London, Conn., assignor to himself and Allen Richards, of same place, for an "Improvement in skirt supporters."

"I claim the two jaws A, A, encompassed by an elastic band or spring C, when used in combination with a detached fulcrum pin B, all being arranged as shown and described, to form a new and improved article of manufacture for the purpose set forth."

No. 2968. Joseph Davis, of East Wilton, N.H., assignor to J. Noone, of Peterboro', N. H., and Wm. Earl, jr., of Troy, N.Y., for an "Improvement in carding engines."

"I claim the above specified arrangement or application of an endless traversing grid or apron (or the mechanical equivalent of either) with the main card cylinder of a carding engine, and to operate therewith substantially in the manner and for the purpose as described. And in combination with the said endless grid or apron and the carding engine or its main card cylinder, I claim the arrangement and combination of an adjustable supporter F, the same being to operate in manner and for the purposes substantially as herein-before set forth."

No. 2969. George Goewey, of New York, N.Y., assignor to himself and E. S. Marsh, Morrisania, N.Y., for an "Improvement in churns."

"I claim the use or employment of the perforated cylinder G, in combination with the screw blade or propeller C, for the purpose of speedily producing butter, and preventing it, as formed, being operated upon or agitated by the movement of the yet unconverted milk, substantially as described."

No. 2970. E. J. Hall, of Highgate, Vt., assignor to himself and C. P. Stimets, for an "Improved spring caster."

"I claim the combination and arrangement with an ordinary caster of the screw shaft C, the spiral springs E, adjustable plates H and I, guido rod G, substantially as and for the purpose specified."

No. 2971. K. H. C. Preston, of Manlius, N. Y., assignor to E. P. Russell, of same place, for an "Improvement in harvesters."

"I claim, 1st, the tapering shape of the single screw thread (d), which I employ for the purpose of enabling the desired amount of motion to be communicated to the crank shaft (C), substantially as herein set forth. When a tapering single screw thread is combined with a shaft, either directly or through the medium of a tube or collar, I also claim acting upon said screw thread by means of a series of pivoted rollers and a driving wheel for carrying the same, substantially as herein set forth. When a tapering single screw thread is combined with a shaft, either directly or through the medium of a tube or collar, I also claim acting upon the said screw-thread through the medium of a series of tapering pivoted rollers, and a suitable driving wheel, substantially in the manner herein set forth."

Re-issues.

No. 142. John H. Landell, of Newark, N. J., patented 4th June, 1861, for an "Improvement in tent fixtures."

"I claim, 1st, the combination of the conical ferrule, with the rings, or either of them, in the manner described. 2nd, construeting the tripod, which supports the tent pole of a ring of sufficient diameter to receive the ferrule of the lower end of the pole, and having legs attached in the manner described. 3d, the combination of the tripod, constructed as described, with the ferrule fitted on the lower ends of the tent pole, in the manner described."

No. 143. Geo. Wood, Jno. King, and Wm. Laurence, of Phila., Pa., assignees of said Wood and King, for an "Improvement in dredging crane."—Patented 9th November, 1858.

"We claim, 1st, the two barrels K, K, hung to the shaft J' in combination with the clutch M, or its equivalent, the whole being arranged on the deck of a vessel, and operating substantially as set forth for the purpose specified. 2nd, in combination with the aforesaid barrels and clutch, or its equivalent, we claim the posts D and D, each having a pulley *a*, and a movable jib E, with pulleys H and G, arranged in respect to the opposite sides of the vessel, substantially as specified. 3rd, the carrier F, with its pulley G, and its hollow stem, as arranged to turn in the socket in the end of the jib, substantially in the manner and for the purpose herein set forth."

Extension.

No. 5399. John F. Winslow, of Troy, N. Y., for an "Improvement in rolling and compressing puddlers balls."—Patented 18th December, 1847; extended 11th December, 1861.

"I claim the method substantially as herein described of compressing or shingling puddlers balls or loops of iron into blooms by the combination of the cam formed compresser and two or more rollers, substantially as described. Secondly, I claim the spring or yielding checks for setting up the ends of the blooms in combination with the combined cam formed compresser and rollers, substantially as described. And, finally, I claim the feeder and discharging follower in combination with the combined cam formed compressor and rollers, for the purpose and in the manner described."

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No. 838. TUESDAY, JANUARY 14, 1862. Price 2d.

Applications for Letters Patent.

(10*th*, 11*th*, *and* 13*th January*, 1862.)

70. Alphonse René Le Mire de Normandy of Odin Lodge, King's Road, Clapham Park, Surrey, Analytical Chemist, for an invention of "Improvements in fixing tubes in tube plates."—Dated 10th January, 1862.

71. John Carter, of Tipton, in the county of Stafford, Machinist, for an invention of "A new or improved draining plough."—Dated 10th January, 1862.

72. Robert Johnson, of Liverpool, in the county of Lancaster, Master Mariner, for an invention of "An improved composition for coating the bottoms of iron ships to prevent their fouling, and other purposes."—Dated 10th January, 1862.

73. Montague Wigzell, of the Strand, Topsham, in the county of Devon, for an invention of "An improved double acting ventilator for railway carriages and other carriages and compartments."—Dated 10th January, 1862.

74. Frederick Moores, of Warrington, in the county of Lancaster, Iron Merchant, for an invention of "Improvements in obtaining motive power."—Dated 10th January, 1862.

75. James Oates, of Mirfield, in the county of York, Cabinet Maker, for an invention of "Improvements in washing machines."—Dated 10th January, 1862.

76. Henry Darvill, of New Windsor, in the county of Berks, Gentleman, for an invention of "The hardening of chalk for building purposes."—Dated 10th January, 1862.

77. William Henry Preece, of the town and county of Southampton, Civil Engineer, for an invention of "Improved apparatus for signalling upon railways."—Dated 10th January, 1862.

78. Louis Petre and Edward Samuel Tucker, of No. 194, Waterloo Road, London, for an invention of "The application of velvet, plush, leather, American cloth, oil cloth, and other such like substances alone and in combination with other materials for advertising boards, show cards, window tickets, and all such uses."—Dated 10th January, 1862.

79. John Kenyon, of Ivy Cottage, Lower Heath, Hampstead, and Archibald Horn, of Great James Street, Bedford Row, both in the county of Middlesex, Engineers, for an invention of "Improvements in railway signalling by electricity, and in the arrangement of apparatus for that purpose."—Dated 10th January, 1862.

80. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in apparatus for generating and applying steam as a motive power."—A communication to him from abroad by Mr. Louis Arnier, of 29, Boulevart St. Martin, Paris, in the empire of France, Mechanician.—Dated 10th January, 1862.

81. Thomas Ramsay, of the town and county of Newcastle-upon-Tyne, Coal Owner, for an invention of "Improvements in the manufacture of coke."—Dated 11th January, 1862.

82. Henry Charlton, of Birmingham, in the county of Warwick, Merchant and Manufacturer, for an invention of "Improvements in the manufacture of certain kinds of shoes for mules and horses."—Dated 11th January, 1862.

83. Joseph White, of 7, Trinity Street, Southwark, in the county of Surrey, for an invention of "Improvements in lubricating or oil cans, or oil feeders, and in the mechanical arrangements for regulating the flow of oil therefrom."—Dated 11th January, 1862.

84. Lanchlan Mackirdy, of Greenock, in the county of Renfrew, Sugar Refiner, for an invention

of "Improvements in apparatuses for reburning animal charcoal."—Dated 11th January, 1862.

85. Thomas Scott, of Nelson Square, in the county of Surrey, Engineer, for an invention of "Improvements in steam engines."—Dated 11th January, 1862.

86. William Wilkinson, of Bayswater, in the county of Middlesex, for an invention of "Improvements in ornamenting and decorating metals, glass, porcelain, parchment and other skins, and in the materials and ingredients employed therefor, also in protecting silver and gold on said materials, and on surfaces or plates of glass or metal, or plates of glass and metal combined, applicable to works of art, furniture, jewellery, and other articles of a useful and ornamental character."—Dated 11th January, 1862.

87. Anthony Gapper Southby, of Bulford, in the county of Wilts, for an invention of "Improvements in the preparation of pulp for paper making."—Dated 13th January, 1862.

88. John Martin Rowan, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in the manufacture of iron and steel."—Dated 13th January, 1862.

89. Thomas Gilbert, of Birmingham, in the county of Warwick, Manufacturer, and Charles Gilbert, of Birmingham aforesaid, Manufacturer, and Thomas Haddon, of Birmingham aforesaid, Manufacturer, for an invention of "An improvement or improvements in the manufacture of swivels for guns, and in machinery to be employed in the said manufacture."—Dated 13th January, 1862.

90. Ferdinand Charles Warlich, of 10, Alma Terrace, New Cross, in the county of Kent, Gentleman, for an invention of "Improvements in the manufacture of artificial fuel."—Dated 13th January, 1862.

91. Thomas Soar, of the town and county of the town of Nottingham, Machine Builder, Jonathan Belshaw, of Radford, in the county of Nottingham, Lace Maker, and Marcus Soar, of the said town and county of the town of Nottingham, Lace Maker, for an invention of "An improved knocker to be attached to doors, shutters, or other parts of premises to which the same may be applicable, and applicable also for the reception of letters and other documents."—Dated 13th January, 1862.

92. John Parker, of Ivy House, Bradford, in the county of York, and Joseph Wells and Benjamin Wells, of Bowling, near Bradford aforesaid, Millwrights, for an invention of "Improvements in steam engines, boilers, furnaces, and apparatus in connection therewith or applicable thereto."—Dated 13th January, 1862.

93. William Edward Gedge, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "Improved means or apparatus for gaining or acquiring motive power."—A communication to him from abroad by Hugus Sarrazin, of 15, Passage de Petites Ecuries, Paris, France.—Dated 13th January, 1862.

94. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the manufacture of cups, bowls, saucers, and other dished articles and cases."—A communication to him from abroad by Frederic Wilhelm Marx, of Paris, France.—Dated 13th January, 1862.

95. Henry Schottlander, of Paris, in the French empire, Merchant, for an invention of "Improvements in albums for containing photographic and other pictures."—Dated 13th January, 1862.

96. George Hewitt, of Ipswich, House and Land Surveyor, for an invention of "Improvements in apparatus used in the manufacture of drain tiles."—Dated 13th January, 1862.

97. Joseph Betteley, of Liverpool, in the county of Lancaster, Iron Merchant, for an invention of "Improvements in ship building."—Dated 13th January, 1862.

98. Thomas Wright Gardner Treeby, of 1, Westbourne Terrace Villas, Paddington, in the county of Middlesex, Gentleman, for an invention of "Improvements in cannon and fire-arms."—Dated 13th January, 1862.

99. James Garth Marshall, of Leeds, in the county of York, Flax Spinner, for an invention of "Improvements in the preparation of flax and other fibres previous to being spun."—Dated 13th January, 1862.

100. Charles Neale May, of Devizes, in the county of Wilts, Engineer, for an invention of "Improvements in the manufacture of pastry, and in apparatus for the same."—Dated 13th January, 1862.

Notices to Proceed.

Notice is hereby given, that

2190. Alphonse Nicolas Saleres, of No. 170, Rue de Charonne, in the city of Paris, in the empire of France, Paper Manufacturer, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in printing and coloring paper, chintz, and other fabrics, and machinery or apparatus for that purpose."

As set forth in his petition, recorded in the said office on the 2nd day of September, 1861.

2196. And Patrick Robertson, of Sun Court Cornhill, in the city of London, has given the like notice in respect of the invention of "Improvements in treating yeast, and in the manufacture of ammoniacal salts, and a substitute for animal charcoal."

As set forth in his petition, recorded in the said office on the 3rd day of September, 1861.

2208. And Charles Edkins, Button Manufacturer, of Birmingham, in the county of Warwick, has given the like notice in respect of the invention of "Certain improvements in ladies' dress-suspenders."

2209. And JOHN EDWARD RIDGES, Coach Builder, of Wolverhampton, in the county of Stafford, and JAMES BARKER, Coach Body Maker, of Birmingham, in the county of Warwick, have given the like notice in respect of the invention of "Certain improvements in composite carriages for funeral and other purposes."

2210. And DANIEL HEYWORTH, of Featherstall Mill, Littleborough, in the county of Lancaster, Manager, and JOHN HEYWORTH, of the city of Manchester, in the said county, Manager, have given the like notice in respect of the invention of "Certain improvements in looms for weaving."

2219. And CHARLES WEIGHTMAN HARRISON, of Holland Grove, Brixton, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in the construction of easters."

As set forth in their respective petitions, all recorded in the said office on the 5th day of September, 1861.

2223. And MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "Improvements in ribbon looms."—A communication from Messrs. Benoit Durand and Claude Crozet, persons resident at No. 11, Rue de la Bourse, St. Etienne (Loire).

2224. And MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "Improvements in the application of the Archimedean screw to the production and transmission of motive-power, and in the apparatus connected therewith."—A communication from Julius Sturm (C.E.), a person resident at Mannheim, in the Grand Duchy of Baden.

2225. And WILLIAM SPENCE, of 50, Chancery Lane, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for dividing and softening vegetable fibres."—A communication to him from abroad by Felix Sorin, of 31, Rue des Fossés, Montmartre, Paris, in the empire of France.

2229. And CHARLES FELTON KIRKMAN, of Palace New Road, Lambeth, has given the like notice in respect of the invention of "Improvements in obtaining manure from sewerage, and in the apparatus employed therein."

2231. And JOHN BROWN, of Burnley, in the county of Lancaster, Overlooker, has given the like notice in respect of the invention of "Certain improvements in power looms for weaving."

As set forth in their respective petitions, all recorded in the said office on the 6th day of September, 1861.

2237. And WILLIAM AINSWORTH, of Adlington, in the county of Lancaster, Weaver, ELLIS HEAP, of the same place, Engine Minder WILLIAM FIELDING, of the same place, Overlooker, and ELI OPENSHAW, of the same place, Overlooker, have given the like notice in respect of the invention of "Certain improvements in power looms for weaving."

2238. And NICHOLAS DORAN PROBY MAILLARD, of Dublin, in the kingdom of Ireland, has given the like notice in respect of the invention of "Improvements in the material and preparation of the material and apparatus for making potash, pearl-ash, and caustic potash of commerce."

2239. And JOHN CARPENDALE, Britannia Metal Smith, and THOMAS MIDDLETON, Table-Blade Grinder, both of Sheffield, in the county of York, have given the like notice in respect of the invention of "Improvements in means of producing raised chasing on copper, silver, and Britannia metal by the application of pressure."

2241. And JOSEPH HOLLAND, of the city of Manchester, Flour Dealer, and GEORGE OKELL, of Ashton-under-Lyne, Cabinet Maker, both in the county of Lancaster, have given the like notice in respect of the invention of "Improvements in apparatus by which an engine or train is made to give an alarm or signal at any required place on arriving at or passing any given point on the railway."

As set forth in their respective petitions, all recorded in the said office on the 7th day of September, 1861.

2245. And GEORGE MALCOLM, of the firm of Malcolm, Ogilive, and Co., of Dundee, in the county of Forfar, North Britain, Manufacturer, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for softening or treating jute, hemp, flax, or other similar fibrous substances."

2246. And WILLIAM SIMONS, of Renfrew, in the county of Renfrew, North Britain, Ship Builder, has given the like notice in respect of the invention of "Improvements in constructing ships or vessels."

2250. And JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in fire grates and furnaces for domestic and other purposes."—A communication to him from abroad by Paul Baudet, of Paris, in the empire of France.

As set forth in their respective petitions, all recorded in the said office on the 9th day of September, 1861.

2255. And JOHN ANTHONY, of No. 10, Oxford Terrace, Poplar, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in steam boilers and generators."

As set forth in his petition, recorded in the said office on the 10th day of September, 1861.

2258. And LEON PIERRE BARRÉ, of Paris, France, and of 4, South Street, Finsbury, London, Gentleman, has given the like notice in respect of the invention of "Improvements in tubular steam boilers."

2260. And WILLIAM LYNALL THOMAS, of Hill Street, Berkeley Square, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in projectiles."

As set forth in their respective petitions, both recorded in the said office on the 11th day of September, 1861.

2262. And GEORGE HENRY BIRKBECK, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, has given the like notice in respect of the invention of "Improvements in needles."—A communication to him from abroad by Thomson Hankey Alexander, of Washington city, in the district of Columbia, in the United States of America.

As set forth in his petition, recorded in the said office on the 12*th day of September*, 1861.

2275. And PAUL DUBRULE, of the town of Tourcoing in the empire of France, Machine Builder, has given the like notice in respect of the invention of "Improvements in apparatus for manufacturing figured or ornamental stuffs with headle power looms."

2278. And RICHARD FELL, of Kingsland, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in compressing and rarefying atmospheric air with machinery, for applying the same to obtain a motive power, part of which is applicable for cooking purposes."

2280. And THOMAS LAURIE MURRAY, of Paris, in the empire of France, Gentleman, has given the like notice in respect of the invention of "Improved applications of mica previously colored or metallized, for letters and signs, decorating churches, rooms, shops, frames, and other ornamental and useful purposes."—A communication to him from abroad by Mr. Frederic Holthausen, of Paris, in the empire of France, Artist.

2281. And JOSEPH BENNETT HOWELL, of the firm of Shortridge, Howell, and Co., Steel Manufacturers, of Sheffield, in the county of York, has given the like notice in respect of the invention of "Improvements in the manufacture of chains and chain cables."

As set forth in their respective petitions, all recorded in the said office on the 13*th day of September*, 1861.

2286. And JOHN ADAMS KNIGHT, of No. 4, Symond's Inn, Chancery Lane, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "An improved apparatus for rendering fatty or oleaginous matter and delivering the same."—A communication to him from abroad by Wellington Lee, Esq., a person resident at No. 197, East 19th Street, New York, United States of America.

2291. And JAMES KING, of Rochdale, in the county of Lancaster, Cotton Spinner, and JOHN SUTCLIFFE, of the same place, Overlooker, have given the like notice in respect of the invention of "Certain improvements in, or applicable to machines for spinning and doubling."

As set forth in their respective petitions, both recorded in the said office on the 14*th day of September*, 1861.

2308. And WILLIAM STEWART, of Peckham, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in apparatuses for supporting persons in, and for enabling them to progress through, the water."

As set forth in his petition, recorded in the said office on the 16*th day of September*, 1861.

2344. And JOHN GRAHAM, of No. 2, Ann Street, Devonport Street, Commercial Road East, in the county of Middlesex, Pattern Maker, has given the like notice in respect of the invention of "An improved double acting force or lift pump for ships' fire engines and other purposes."

As set forth in his petition, recorded in the said office on the 19*th day of September*, 1861.

2357. And WILLIAM GODLEY CREAMER, of New York, United States of America, and of Woburn Place, in the county of Middlesex, Manufacturer, has given the like notice in respect of the invention of "Improvements in railway breaks, and in apparatus for actuating the same."

As set forth in his petition, recorded in the said office on the 20*th day of September*, 1861.

2380. And ANGELO JAMES SEDLEY, of 210, Regent Street, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in constructing bridges and viaducts."

As set forth in his petition, recorded in the said office on the 24*th day of September*, 1861.

2388. And CARL GUSTAV LENK, of 24, Maddox Street, Regent Street, in the county of Middlesex, Mechanical Engineer, has given the like notice in respect of the invention of "Improved pens."

As set forth in his petition, recorded in the said office on the 25*th day of September*, 1861.

2423. And WILLIAM NEWTON WILSON, of 144, High Holborn, in the county of Middlesex, Sewing Machine Manufacturer, has given the like notice in respect of the invention of "Improvements in sewing machines and apparatus connected therewith."

As set forth in his petition, recorded in the said office on the 28*th day of September*, 1861.

2466. And THOMAS WARWICK, of Birmingham, in the county of Warwick, Machinist, has given the like notice in respect of the invention of "An improvement in the manufacture of umbrellas and parasols, and improvements in machinery to be used in the manufacture of umbrellas and parasols."—The result partly of a communication made to him by Charles Augustus Van Kirk, of Philadelphia, in the United States of America, and partly of invention and discovery made by him.

As set forth in his petition, recorded in the said office on the 3*rd day of October*, 1861.

2476. And EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, has given the like notice in respect of the invention of "Improvements in the permanent way of railways."—A communication to him from abroad by Laurent Rigolier, of Lyons, in the empire of France.

As set forth in his petition, recorded in the said office on the 4*th day of October*, 1861.

2522. And FREDERICK CURTIS, of Newton, in the county of Middlesex, and state of Massachusetts, of the United States of America, has given the like notice in respect of the invention of "A new and useful improvement in fire arms."

As set forth in his petition, recorded in the said office on the 9*th day of October*, 1861.

2640. And Howard Busby Fox, of Liverpool, in the county of Lancaster, has given the like notice in respect of the invention of "Improvements applicable to iron and other metallic bedsteads."
As set forth in his petition, recorded in the said office on the 2nd day of October, 1861.

2745. And Myer Myers and Maurice Myers, trading under the style or firm of Myers and Son, Steel Pen Manufacturers, of Birmingham, in the county of Warwick, and William Hill, Manager to the said firm, also of Birmingham aforesaid, have given the like notice in respect of the invention of "Certain improvements in metallic clips or joints for holding, connecting, and adjusting crinolines, and other purposes."
As set forth in their petition, recorded in the said office on the 1st day of November, 1861.

2800. And William Albert Shepard, of Pall Mall, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in preparing and treating gutta percha and india rubber."
As set forth in his petition, recorded in the said office on the 7th day of November, 1861.

2848. And John Hodgkinson, of Bolton, in the county of Lancaster, Cotton Spinner, and Daniel Greenhalgh, of the same place, Manager, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for preparing cotton, cotton-waste, or other fibrous materials to be spun."
As set forth in their petition, recorded in the said office on the 13th day of November, 1861.

2902. And James Hemingway, of Robert Town, in the county of York, Artist, has given the like notice in respect of the invention of "Improvements in machinery or apparatus to be used in the working, "winning," or mining of coal, clay, shale, and other minerals or earthy matters."
As set forth in his petition, recorded in the said office on the 19th day of November, 1861.

2961. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "An improved method of removing and preventing the formation of calcareous and saline deposits in steam boilers."—A communication to him from abroad by Lewis Baird, of Cambridge, Massachusetts, in the United States of America.
As set forth in his petition, recorded in the said office on the 25th day of November, 1861.

2997. And Henry Wilde, of the city of Manchester, Engineer, has given the like notice respect of the invention of "Improvements in magneto-electric telegraphs, and in apparatus connected therewith."
As set forth in his petition, recorded in the said office on the 28th day of November, 1861.

3047. And Allen Thomas Carr, of Carlisle Street, Soho, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "The addition to horses' shoes of certain material to prevent slipping."
As set forth in his petition, recorded in the said office on the 5th day of December, 1861.

3142. And Eduard Claude Barbotte de Beaulieu, of Avallon, in the department of Yonne, in the empire of France, has given the like notice in respect of the invention of "Improvements in apparatus for extracting gold dust from auriferous sands."

3148. And William Husband, of Hayle, in the county of Cornwall, has given the like notice in respect of the invention of "An improved water safety valve."
As set forth in their respective petitions, both recorded in the said office on the 14th day of December, 1861.

3154. And William Bartram and William Sheldon Harwood, of Sheffield, in the county of York, Powder Flask Manufacturers, have given the like notice in respect of the invention of "An improved apparatus for filing and ramming cartridges for breech-loading and other fire-arms."
As set forth in their petition, recorded in the said office on the 16th day of December, 1861.

3159. And Walter Henry Tucker, of 181, Fleet Street, Loudon, has given the like notice in respect of the invention of "Improvements in locks."
As set forth in his petition, recorded in the said office on the 17th day of December, 1861.

3201. And Thomas Green, of Smithfield Iron Works, Leeds, in the county of York, Willoughby Green, of 11, Brunswick Place, Leeds, and Robert Mathers, of Trafalgar Street, Leeds, have given the like notice in respect of the invention of "Improvements in lawn mowing, rolling, and collecting machines."
As set forth in their petition, recorded in the said office on the 20th day of December, 1861.

3225. And François Laurent and John Casthelaz, of No. 19, Rue Ste. Croix de la Bretonnerie, Paris, Chemists, have given the like notice in respect of the invention of "Improvements in the manufacture of coloring matters."
As set forth in their petition, recorded in the said office on the 24th day of December, 1861.

36. And George Tomlinson Bousfield, of Sussex Place, Loughborough Park, Brixton, in the county of Surrey, has given the like notice in respect of the invention of "Certain new and useful improvements in machinery for propelling water craft."—A communication to him from abroad by Edward Sabine Renwick, a person resident at 335, Broadway, New York, in the United States of America.
As set forth in his petition, recorded in the said office on the 4th day of January, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

11th January, 1862.

1767. Thomas Smith and George Taylor, of the Vulcan Works, Ipswich, for an invention of "Improvements in horse rakes and cultivators, and in wheels for the same and other carriages."—Dated 13th July, 1861.

1772. Thomas Cobley, of Meerholz, in the Electorate of Hesse, Germany, Metallurgist, for an invention of "Improvements in the manufacture of metallic and earthy silicates or siliceous compounds of the same, from the metallic and earthy bases or their salts and soluble alkaline silicates, the formation of alkaline acetates or caustic alkalies, and application of the same."—Dated 15th July, 1861.

1773. Thomas Cobley, of Meerholz, Electorate of Hesse, Germany, Metallurgist, for an invention of "An improved process for preserving and indurating timber, wood, and other vegetable matters, and for rendering the same uninflammable."—Dated 15th July, 1861.

1774. Rees Taylor and Thomas Price, of Tydu Tin Plate Works, Bassaleg, in the county of Monmouth, Mechanics, for an invention of "Improvements in the manufacture of tin and terneplates."—Dated 15th July, 1861.

1775. James Cane Coombe, Chemist, and James Wright, Civil Engineer, both of 42, Bridge Street, Blackfriars, London, for an invention of "Improvements in the manufacture of glass, pottery, porcelain, and other ceramic and plastic wares."—Dated 15th July, 1861.

1776. Thomas Cobley, of Meerholz, Electorate of Hesse, Germany, Metallurgist, for an invention of "An improved process for the production or manufacture of fluo-silicates of tin, zinc, and baryta, and their application as pigments for glazing, enamelling, and in the manufacture of glass."—Dated 15th July, 1861.

1777. Benjamin Browne, of No. 52, King William Street, in the city of London, Civil Enginer and Patent Agent, for an invention of "Improved machinery for clearing and smoothing spun thread or yarns, and other similar fibrous materials."—A communication to him from abroad by Engène Abd-er-Halden and Charles Seiler, both of Lacroix aux Mines, Vosges, in the empire of France.—Dated 15th July, 1861.

1779. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for cleaning rice."—A communication to him from abroad by Henry Beaufort Sears, of the city of New York, in the United States of America, Merchant.—Dated 15th July, 1861.

1788. John Blinkhorn, of Chorley, in the county of Lancaster, Accountant, for an invention of "Improvements in machinery or apparatus for working railway signals."—Dated 16th July, 1861.

1789. Richard Jones, of Camden Town, in the county of Middlesex, for an invention of "Improvements in safety lamps."—Dated 16th July, 1861.

1793. William Palmer, of Sutton Street, Clerkenwell, for an invention of "Improvements in lamps."—Dated 16th July, 1861.

1807. Benjamin Johnson, of No. 1, Surrey Place, Kennington Park, in the county of Surrey, and William Henry Anderson, of White Cottage, Stockwell Place, in the county of Surrey, for an invention of "Improvements in pianofortes."—Dated 18th July, 1861.

1810. Peter Williams, of Salford, in the county of Lancaster, Machinist, and Thomas Parkinson, of Bury, in the same county, Cotton Spinner, for an invention of "Certain improvements in carding engines for carding cotton and other fibrous substances."—Dated 18th July, 1861.

1814. Jasper Wheeler Rogers, of Peat House, Robertstown, county Kildare, in the kingdom of Ireland, Civil Engineer, for an invention of "An improved mode of building ships and floating batteries, applicable also in part to the construction of fortifications."—Dated 18th July, 1861.

1816. Daniel Gallafent, of 15, Stepney Causeway, in the county of Middlesex, Engineer, for an invention of "Certain improvements in refrigerators for cooling liquids."—Dated 19th July, 1861.

1818. Philander Shaw, of Boston, in the county of Suffolk, in the state of Massachusetts, one of the United States of America, for an invention of "Improvements in hot-air engines."—Dated 19th July, 1861.

1819. Robert Laing and George Horwood Cossins, of Ince, near Wigan, in the county of Lancaster, for an invention of "An improved mode of obtaining nitrous acid gas for making sulphuric acid,"—Dated 19th July, 1861.

1820. Richard Charles Newbery, of President Street West, Goswell Road, in the county of Middlesex, for an invention of "Improvements in the manufacture of enamelled cards."—Dated 19th July, 1861.

1824. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in breech-loading ordnance, applicable also to small arms."—A communication to him from abroad by Lewis Wells Broadwell, residing at Saint Petersburg, Russia.—Dated 19th July, 1861.

1834. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the method of and apparatus for obtaining an increased effect from lights."—A communication to him from abroad by Charles François Le Page and Cyprien Poisson, both of 33, Boulevard Saint Martin, Paris, France.—Dated 20th July, 1861.

14th January, 1862.

1795. Joseph Heap Butterworth, of Vicar's Moss Mills, Rochdale, in the county of Lancaster, Cotton Spinner, for an invention of "An improved mode of and apparatus for heating water or other fluids."—A communication to him from abroad by Jérôme Eugène Tourné, of New Orleans, in the

state of Louisiana, United States of America.—Dated 17th July, 1861.

1796. Joseph Heape Butterworth, of Vicar's Moss Mills, Rochdale, in the county of Lancaster, Cotton Spinner, for an invention of "An improved mode of and apparatus for heating air or desiccating wet or moist substances."—A communication to him from abroad by Jérôme Eugène Tourné, of New Orleans, in the state of Louisiana, United States of America.—Dated 17th July, 1861.

1826. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improved apparatus for copying letters or writings and draughts."—A communication to him from abroad by Francis Tryon, George Heydecker, and William Van Anden, of New York, in the United States of America.—Dated 19th July, 1861.

1827. Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention of "Improvements in machinery or apparatus for manufacturing woven seamless gloves."—A communication to him from abroad by Messieurs Jean Bezon and Alphonse Berthod, both of Lyons, in the empire of France.—Dated 20th July, 1861.

1838. John Bland Wood, of Broughton, near Manchester, in the county of Lancaster, Doctor of Medicine, for an invention of "Improvements in the manufacture of shuttle pickers."—Dated 22nd July, 1861.

1839. William Wood, of the Railway Foundry, Reading, in the county of Berks, Ironfounder, for an invention of "Improvements in beams and girders, and in applying the same in buildings."—Dated 22nd July, 1861.

1846. Robert Thompson, of Charlton, in the county of Kent, Engineer, for an invention of "Improvements in machinery for cutting wood."—Dated 23rd July, 1861.

1858. Alfred Wood, of Lewes, in the county of Sussex, for an invention of "Improvements in apparatus employed for fermenting purposes in brewing beer, as also for storing beer, and for general purposes of fermentation."—Dated 24th July, 1861.

1871. Charles Robertson, of Edinburgh, in the county of Mid-Lothian, North Britain, Advocate, for an invention of "Improvements in sights for fire arms."—Dated 25th July, 1861.

1921. Joseph Eugène Drouot, of 2, Rue Ste. Appoline, Paris, France, and of 4, South Street, Finsbury, London, Baker, for an invention of "Improvements in machinery or apparatus for kneading."—Dated 2nd August, 1861.

1932. Patrick O'Hanlon, of Nile Street, in the town and county of the town of Kingston-upon-Hull, Boiler Maker, for an invention of "Improvements in marine and other steam boilers, with reference to economy of fuel."—Dated 3rd August, 1861.

1967. Louis William Viollier, U.S. Consul at Lyons, for an invention of "Improvements in machinery for doubling and twisting yarns and threads, and for manufacturing wire rope."—A communication from Mr. Antoine Ratignez, a person resident at Lyons, France. — Dated 7th August, 1861.

2031. John Bethell, of No. 38, King William Street, London, Gentleman, for an invention of "Improvements in the manufacture from steatite of journals, axle boxes, and bearings for machinery, axles and spindles to work in, smoking pipes, buttons, crucibles, and pots for chemical and smelting purposes, and also of a lubricating compound for railway and other carriages." — Dated 15th August, 1861.

2073. Thomas Sutton, Bachelor of Arts, Lecturer on photography at King's College, London, for an invention of "An improved camera for taking photographic portraits and instantaneous pictures." —Dated 20th August, 1861.

2093. Westley Richards, of Birmingham, in the county of Warwick, for an invention of "Improvements in rifles and projectiles." — Dated 21st August, 1861.

2335. James Cane Coombe and James Wright, Civil Engineer, both of 42, Bridge Street, Blackfriars, London, for an invention of "Improvements in the manufacture of stones, bricks, tiles, slabs, statuary, and such like materials, and in the method of and means for cleansing and indurating the same when employed in buildings or for building purposes, and for preserving them from atmospheric and other influences."—Dated 19th September, 1861.

2358. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in machinery for combing cotton and other fibrous material."—A communication from the inventors Cullen Whipple, a person resident at the city and county of Providence, in the state of Rhode Island and United States of America, and Rufus Stafford, resident at Smithfield, in the county and state aforesaid.—Dated 20th September, 1861.

2360. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in machinery for manufacturing shoes for horses and other animals."—A communication from Edward Adams Cutler, a person resident at the city and county of Providence, in the state of Rhode Island and United States of America.—Dated 20th September, 1861.

2379. William Edward Wiley, of Great Hampton Street, Birmingham, Gold Pen and Pencil Case Manufacturer, for an invention of "Improvements in pens and penholders." — Dated 24th September, 1861.

2555. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improved machinery for dressing or cleaning wheat and other grain."—A communication to him from abroad by Samuel Bentz, of Hood's Mills, near Baltimore, Maryland, in the United States of America.—Dated 12th October, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 11th January, 1862, inclusive.*)

9th January.

74. Thomas James Claxton, of the city of Montreal, Canada, Merchant, for an invention of "Improvements in the manufacture of boots and shoes."—A communication from Mellen Bray, of Montreal aforesaid, Boot and Shoe Maker.—Dated 10th January, 1859.

80. Charles Middleton Kernot, of Gloucester House, West Cowes, Isle of Wight, in the county of Southampton, Doctor of Medicine, Doctor of of Laws and Logic, Doctor of Philosophy, and Member of the Royal College of Surgeons, England, &c., for an invention of "Improvements in purifying and decolorizing paraffine, and rendering the same white, hard, and sweet."—Dated 11th January, 1859.

89. Nicholas Procter Burgh, of Sheerness, Engineer, for an invention of "Improvements in steam engines."—Dated 11th January, 1859.

98. William McNaught, of Manchester, in the county of Lancaster, Engineer, and William McNaught, of Rochdale, in the county of Lancaster, Engineer, for an invention of "Improvements in steam engines, and in apparatus connected therewith."—Dated 12th January, 1859.

121. Thomas Sampson, of Calle Cartaños, No. 8, Barcelona, Spain, for an invention of "Improvements in apparatus for feeding steam-boilers with water."—Dated 13th January, 1859.

10th January.

81. John Biers, the younger, of No. 38, Rochester Road, Kentish Town, in the Parish of Saint Pancras, in the county of Middlesex, Coach Maker, for an invention of "A self-acting carriage wheel break."—Dated 11th January, 1859.

11th January.

103. Charles Beslay, of 52, Rue St. Sébastian, Paris, in the empire of France, Engineer, for an invention of "Improvements in coating or covering iron or steel with tin, zinc, or lead, or alloys of those metals, by electrical deposit."—Dated 12th January, 1859.

108. Henry Critchley, of Bury, in the county of Lancaster, Engineer, and Solomon Elston, of the same place, Engineer, for an invention of "Certain improvements in pistons for steam engines or other purposes."—Dated 13th January, 1859.

113. James John Stevens, of Darlington Works, Southwark, in the county of Surrey, Engineer, for an invention of "Improvements in railway signal apparatuses."—Dated 13th January, 1859.

114. Francois Jules Manceaux, of Paris, in the empire of France, Manufacturer, and Eugene Napoléon Vieillard, of the same place, Gunsmith, for an invention of "Improvements in breech-loading fire-arms and in cartridges."—Dated 13th January, 1859.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March ,,
268	,, April to June ,,
291	,, July to September ,,
321	,, October to December ,,
345	A.D. 1854—January to March ,,
371	,, April to June ,,
399	,, July to September ,,
424	,, October to December ,,
451	A.D. 1855—January to March ,,
475	,, April to June ,,
505	,, July to September ,,
527	,, October to December ,,
553	A.D. 1856—January to March ,,
579	,, April to June ,,
605	,, July to September ,,
632	,, October to December ,,
660	A.D. 1857—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1858—January to March ,,
789	,, April to June ,,
815	,, July to September ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632	A.D. 1852—October to December inclusive
660	A.D. 1853—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1854—January to March ,,
789	,, April to June ,,
815	,, July to September ,,

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

FOREIGN PATENTS.

BELGIUM.*

List of Patents Delivered on the 31st December, 1861.†

(*Communicated by the Belgian Government.*)

(For previous List, see No. 834 of this Journal.)

11,632. Aug. Hottiaux, of Mesnil, Philippeville, for "An apparatus for beating scythes."—Dated 22nd October, 1861.

11,727. A. J. V. Dopter, represented by Tarride, of Brussels, for an imported invention of "A mode of printing all kinds of colours."—Dated 14th November, 1861.—(French Patent, 21st June, 1858.)

11,803. A. Mestelan, represented by A. Calvet, of Brussels, for an imported invention of "Improvements in the manufacture of chain cables."—Dated 26th November, 1861.—(French Patent, 19th January, 1860.)

11,820. G. Jacquemin, represented by V. Jacquemin, of Brussels, for an imported invention of "A mould for casting fire-grates."—Dated 30th November, 1861.—(French Patent, 15th November, 1861.)

11,836. T. Petitjean, of Laeken-Molenbeek St. Jean, for "A mode of washing soiled glass, iron, and obtaining fluohydric acid." — Dated 4th December, 1861.

11,837. A. G. Moufflet, represented by H. Biebuyck, of Brussels, for an imported invention of "An apparatus for drying and boiling corn, roots, and other plants for the concentration of syrup."—Dated 4th December, 1861.—(French Patent, 22nd August, 1861.)

11,838. A. N. Burdel, represented by H. Biebuyck, of Brussels, for "A composition for cleaning, scouring, and reviving cloth, woollen fibres, and lace-work of all colours."—Dated 4th December, 1861.—(French Patent, 29th January, 1859.)

11,839. J. De Bary, represented by H. Biebuyck, of Brussels, for "A machine for making cigars." —Dated 4th December, 1861.

11,840. W. Rowan, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "Cylinders, drums, and scutchers of machines for heckling and preparing flax and similar substances."—Dated 4th December, 1861.—(Original Patent, 18th October, 1861.)

11,841. J. Schoenfeld, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in clasps of portemonnaies, pocket-books, ladies' bags, &c."—Dated 5th December, 1861.—(French Patent, 9th October, 1861.)

11,842. M. A. A. P. C. Sourdon, represented by O. Daillencourt, of Brussels, for an imported invention of "Fronts of chimney screens, fans, and similar objects."—Dated 5th December, 1861.—(French Patent, 27th November, 1861.)

11,843. S. Foubert, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in the construction of two wheeled carriages." —Dated 5th December, 1861.—(French Patent, 30th January, 1860.)

11,844. J. B. Root, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in rotary engines."—Dated 5th December, 1861.—(French Patent, 28th November, 1861.)

11,845. E. C. Healey, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in ordnance and other fire-arms."—Dated 5th December, 1861.—(English Patent, 31st May, 1861.)

11,846. L. M. A. A. De Courson de la Villeneuve, represented by A. Calvet, of Brussels, for "A cold process of defecating and purifying the juice of cane, beetroot, &c., previous to boiling."—Dated 5th December, 1861.

11,847. T. A. Weston, represented by H. De Moor of Lokeren, for an imported invention of "A system of pulleys for raising weights."—Dated 2nd December, 1861.—(English Patent, 25th April, 1859.)

11,848. R. Malherbe, of Charleroi, for "A fahrkunst (man-engine) with a direct traction and cranks without a beam."—Dated 5th December, 1861.

11,849 W. H. Buckland, represented by H. Biebuyck, of Brussels, for "Improvements in the treatment of peat."—Dated 6th December, 1861.

11,850. T. Cabourg, represented by H. Biebuyck, of Brussels, for an imported invention of "A machine with endless thread for screwing leather." —Dated 7th December, 1861.

11,851. F. J. Manceaux, represented by L. Anoul, of Ixelles, for an imported invention of "Fastening barrels of breech-loaders.— Dated 7th December, 1861.—(English Patent, 3rd June, 1861.)

11,852. F. Loignon and V. Casse, represented by L. Meckenheim, of Ixelles, for an imported invention of "Open-worked tissue for the manufacture of bags and other articles."—Dated 7th December, 1861.—(French Patent, 18th June, 1861.)

11,853. J. B. Fondu, of Lodelinsart, a Patent of Improvement for "Grates that are perforated horizontally." — Dated 9th December, 1861.—(Original Patent, 22nd September, 1860.)

11,854. F. Preston, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of fire-arms and projectiles." — Dated 9th December, 1861. — (French Patent, 5th November, 1860.)

11,855. A. Leroy, of "Brussels, for "Improvements in the stitches obtained by sewing machines."—Dated 9th December, 1861.

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

11,856. Aug. Van Bambeke, of Malines, for "A system of transmitting the precision of a regulator to large clocks."—Dated 11th December, 1861.

11,857. Alf. Robyns, of Brussels, for "Ice horse-shoes."—Dated 10th December, 1861.

11,858. Ch. Platevoet, of Linkebeek, for "Treatment of straw for obtaining paper pulp, and using the residue thereof."—Dated 10th December, 1861.

11,859. F. Lavallée, sen. and jun., represented by Eug. Guillery, of Brussels, for an imported invention of "Improvements in machines for cutting the wood of matches, &c."—Dated 11th December, 1861.—(French Patent, 25th November, 1861.)

11,860. E. J. Hoorickx, represented by T. Steppe, of Brussels, for "Applying medicamental substances in general to the manufacture of cigars for the purpose of neutralizing the effects of nicotine." Dated 11th December, 1861.

11,861. J. G. Willans and W. H. Smith, represented by J. Piddington, of Brussels, for an imported invention of "Treatment and application of the oxide of hydrate of iron."—Dated 11th December, 1861.—(French Patent, 14th December, 1861.)

11,862. J. Cowan, represented by A. Crooy, of Brussels, a Patent of Improvement, for "Kilns for reviving animal charcoal."—Dated 11th December, 1861.—(Original Patent, 21st November, 1861.)

11,863. M. L. M. Descoutures, represented by J. Piddington, of Brussels, for "Fire-arms with an oscillating breech."—Dated 11th December, 1861.

11,864. Ad. Thonou, of Celles-Waremme, for "A motor applicable to thrashing machines."—Dated 11th December, 1861.

11,865. Ed. Vidal, of Antwerp, for "A cap for judges."—Dated 13th December, 1861.

11,866. A. Baillot, of St. Josse-ten-Noode, for "Shuttles of sewing machines."—Dated 12th December, 1861.

11,867. E. Franckx, of Brussels, for "Rifled gun-barrels."—Dated 13th December, 1861.

11,868. P. J. Derette, of Brussels, a Patent of Improvement for "Pistons of brass instruments."—Dated 13th September, 1861.—(Original Patent, 5th June, 1861.)

11,869. T. and O. Moreau, Brothers, of Boussu for "Improvements in air-tight taps with clack-valves."—Dated 13th December, 1861.

11,870. J. Rassart, of Jumet-Charleroi, for "Pistons of draining and other pumps."—Dated 13th December, 1861.

11,871. L. Schmidt, Ad. Marteaux, and J. Rayon, of Lodelinsart-Charleroi, for "A glass stretching furnace worked by means of gas, water, and coal."—Dated 16th December, 1861.

11,872. M. J. Léonard, of Ghent, for "A system of facilitating the flow of water in suction pipes of pumps."—Dated 13th December, 1861.

11,873. J. Van Wedinghen, of Brussels, for "Manufacture of cigarets."—Dated 13th December, 1861.

11,874. F. A. F. Vanderaey, of Uecle, a Patent of Improvement for "A machine with a continuous movement."—Dated 13th December, 1861.—(Original Patent, 18th November, 1861.)

11,875. J. W. Bryce, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in breech-loading ordnance."—Dated 13th December, 1861.—(French Patent, 10th December, 1861.)

11,876. D. Vogl, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in dresses."—Dated 13th December, 1861.—(French Patent, 11th December, 1861.)

11,877. J. Cochrane, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in gasmeters."—Dated 13th December, 1861.—(French Patent, 10th December, 1861.)

11,878. Ch. Auer De Welsbach, represented by H. Biebuyck, of Brussels, for an imported invention of "Utilizing a textile substance for spinning and weaving."—Dated 13th December, 1861.—(French Patent, 10th December, 1861.)

11,879. A. A. Gohin, sen., represented by H. Biebuyck, of Brussels, for an imported invention of "Preparing natural thistles for teaseling and dressing stuffs."—Dated 13th December, 1861.——(French Patent, 2nd November, 1860.)

11,880. C. H. MacCormick, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in harvesting machines."—Dated 13th December, 1861.—(French Patent, 6th December, 1861.)

11,881. J. Heuze, of Hodimont-Verviers, for "A machine for washing wool and waste wool."—Dated 17th December, 1861.

11,882. F. Lebacq, of Brussels, for "Ice horse-shoes."—Dated 14th December, 1861.

11,883. A. and Ch. Delnest and E. François, of Mons, for "A valve for discharge pipes (crapaudine)."—Dated 14th December, 1861.

11,884. W. Van Anden, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in machines for cutting files."—Dated 17th December, 1861.—(English Patent, 4th October, 1861.)

11,885. S. S. White, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in artificial teeth."—Dated 17th December, 1861.—(French Patent, 4th October, 1861.)

11,886. A. Périmon, represented by O. Daillencourt, of Brussels, for an imported invention of "A press with checks for blank and wet stamps."—Dated 17th December, 1861.—(French Patent, 10th December, 1861.

11,887. J. M. A. H. Taurines, represented by H. Biebuyck, of Brussels, for an imported invention of "Scales and weighing machines."—Dated 17th December, 1861.—(French Patent, 13th May, 1861.)

11,888. F. A. Testud de Beauregard, represented by H. Biebuyck, of Brussels, for "An aerohydric blast with a superheating apparatus applicable to fireplaces and industrial furnaces."—Dated 17th December, 1861.—(French Patent, 5th June, 1860.)

11,889. J. Laurent and Casthelaz, represented by L. Anoul, of Ixelles, for an imported invention of "Treatment and application of colouring substanees."—Dated 17th December, 1861.—(Freneh Patent, 8th Deeember, 1861.)

11,890. L. Ackermans, of Brussels, for "A mode of fixing rafters of east or rolled iron."—Dated 18th Deeember, 1861.

11,891. J. A. J. Bullough, represented by H. Biebuyek, of Brussels, for an imported invention of "Improvements in looms."—Dated 18th December, 1861.—(English Patent, 14th May, 1861.)

11,892. J. Gamard, represented by O. Dailleneourt, of Brussels, for an imported invention of "A kind of globes for lighting apparatus."—Dated 18th Deeember, 1861.—(Freneh Patent, 18th November, 1861.)

11,893. J. D. A. Favier, represented by O. Dailleneourt, of Brussels, for an imported invention of "Manufaeture of artifieial flowers, leaves, foliage, and fruit." — Dated 18th Deeember, 1861.—(Freneh Patent, 5th Deeember, 1861.)

11,894. De Clercq and Co., of Ixelles, a Patent of Improvement for "An apparatus for raising water and feeding steam boilers."—Dated 18th Deeember, 1861.— (Original Patent, 5th November, 1861.)

11,895. F. Vanlaire and E. Tumsonet, of Châtelet-Charleroi, for "A steam-engine without eylinder and piston."—Dated 19th December, 1861.

11,896. H. Lavignac, of Liége, for "A manifold steam-boiler applieable to sugar-works."—Dated 16th Deeember, 1861.

11,897. C. A. F. De Burlaymont, of Ixelles, for "Eeonomieal fuel." — Dated 19th Deeember, 1861.

11,898. F. F. Dumarchey, represented by J. Smets, of Brussels, for an imported invention of "A maehine for erushing stone."—Dated 19th Deeember, 1861.

11,899. F. Lavallée, sen. and jun., represented by O. Dailleneourt, of Brussels, a Patent of Improvement for "A maehine for eutting the wood of matehes, &e."—Dated 20th Deeember, 1861.—(Original Patent, 11th Deeember, 1861.)

11,900. J. J. C. H. De Kuyper, of Antwerp, for "A system of distilling."—Dated 20th December, 1861.

11,901. M. J. Motte, of Marehienne au Pont, for "A turbinoid ventilator for mines."—Dated 23rd Deeember, 1861.

11,902. F. M. G. Brochard and A. A. A. Cressent, represented by O. Dailleneourt, of Brussels, for an imported invention of "Improvements in the manufaeture of gloves."—Dated 21st Deeember, 1861. — (English Patent, 6th Deeember, 1861.

11,903. E. J. Hoorickx, of Brussels, a Patent of Improvement for "Application of medieamentous substanees to tobaeeo in general, for the purpose of neutralizing the effects of nieotine."—Dated 21st Deeember, 1861.—(Original Patent, 11th December, 1861.)

11,904. H. Damide, of Dottignies, a Patent of Improvement for "A machine for the manufacture of tiles, flagstones, and other artieles." — Dated 23rd December, 1861. —(Original Patent, 20th November, 1860.)

11,905. M. Adler, of Courtrai, for "A tooth apparatus for reetifying teeth."—Dated 23rd December, 1861.

11,906. Ad. Karp, of Arlon, for "An apparatus for introducing fresh air into mines, and for preventing explosions of fire-damp."—Dated 23rd Deeember, 1861.

11,907. J. Vanden Kerkhoven, of Lierre, for "A kitchen range." — Dated 26th December, 1861.

11,908. A. Callès, of Ixelles, for "Motive power." —Dated 23rd Deeember, 1861.

11,909. F. Delamotte, represented by A. Calvet, of Brussels, a Patent of Improvement for "Manufaeture of metallic springs for erinolines." —Dated 23rd Deeember, 1861.—(Original Patent, 3rd Deeember, 1860.)

11,910. R. Timmermans, Erbslohe, and Co., of Moneeau-sur-Sambre, for "Manufaeture of hinges."—Dated 27th Deeember, 1861.

11,911. P. A. De Fontaine-Moreau, represented by D. De Vos-Verraert, of Brussels, for "Improvements in the treatment of fat substanees for the manufaeture of eandles."—Dated 24th December, 1861.

11,912. J. Tyler represented by W. H. Kirkpatriek, of Ixelles, for an imported invention of "Improvements in the manufaeture of elarinets." —Dated 24th Deeember, 1861.—(English Patent, 8th November, 1861.)

11,913. E. Vauvillé, represented by L. N. De Meekenheim, of Ixelles, for an imported invention of "A mode of using the smoke issuing from the spouts of boilers for evaporating and boiling beetroot syrup."—Dated 24th Deeember, 1861.—(Freneh Patent, 21st June, 1861.)

11,914. Wheeler, Wilson, and Co., represented by R. Culliford, of Brussels, for an imported invention of "Improvements in sewing maehines." —Dated 24th December, 1861.—(American Patent, 19th Deeember, 1854.)

11,915. Falisse and Trapmann, of Liége, for "Steam loeomotion applieable to canals and rivers."—Dated 24th Deeember, 1861.

11,916. J. Jaspar, of Liége, for "A mode of utilizing the largest amount of waste heat of furnaees for heating the air required for the eombustion of fuel therein."—Dated 24th December, 1861.

11,917. The Vieille Montague Company, represented by H. Benard, of Angleur-Liége, for "A mixed furnaee for the reduetion of zinc ores."—Dated 27th December, 1861.

11,918. P. N. Michaux, of Herstal-Liége, for "Improvements in Beringer's breech-loading firearms."—Dated 28th December, 1861.

11,919. J. Pauwels, Lodelinsart, a Patent of Improvement for "An instrument for blowing glass." —Dated 28th Deeember, 1861.—(Original Patent, 30th November, 1860.)

11,920. F. H. J. Van Kemmel, represented by X. Raelot, of Brussels, for "A system of eompasses with castors."—Dated 28th December, 1861.

11,921. Moulin, of Brussels, for "Cutting gloves." —Dated 27th December, 1861.

11,922. J. Vanden Berghe de Binckum, of Ixelles, for "A screw-driver for Lefaucheux' guns."—Dated 27th December, 1861.

11,923. M. Colson, represented by H. Biebuyck, of Brussels, for "Arrangements in steam-engines for raising water."—Dated 27th December, 1861.

11,924. L. Bayard, represented by H. Biebuyck, of Brussels, for an imported invention of "Silk fabrics for hats."— Dated 27th December, 1861. —(French Patent, 2nd December, 1861.)

11,925. G. Cordier, represented by H. Biebuyck, of Brussels, for an imported invention of "An apparatus for finishing tissues."— Dated 27th December, 1861.—(French Patent, 15th December, 1859.)

11,926. E. E. L. Miroux, represented by H. Biebuyck, of Brussels, for an imported invention of "A machine for drawing hot iron."—Dated 27th December, 1861.—(French Patent, 23rd December, 1861.)

11,927. A. H. Leplay and J. F. Cuisinier, represented by H. Biebuyck, of Brussels, for an imported invention of "A process for reviving animal charcoal in sugar.works, and for the manufacture of syrup."—Dated 27th December, 1861.—(French Patent, 26th November, 1861.)

11,928. A. Friedmann and F. E. D'Erlanger, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "A fireplace of steam generators and furnaces of metallurgical works."—Dated 27th December, 1861.—Original Patent, 6th November, 1861.)

11,929. J. A. Piégard, represented by O. Daillencourt, of Brussels, for an imported invention of "Clasps and fastenings of collars."—Dated 27th December, 1861.—(French Patent, 7th December, 1861.)

11,930. J. S. Belloche and Bollack, Brothers, represented by H. Biebuyck, of Brussels, for "A so-called 'Bouquet parasol.'"—Dated 28th December, 1861.—(French Patent, 8th May, 1861.)

11,931. Ed. Tailbouis, represented by H. Biebuyck, of Brussels, for "Improvements in rectilinear hosiery frames."—Dated 28th December, 1861.

11,932. J. B. Bruyr, of Falisolle-Fosse, for "A piston of locomotive engines."—Dated 30th December, 1861.

11,933. V. Mirland, of Pecq, a Patent of Improvement for "Manufacture of dried pulp of fruit."—Dated 31st December, 1861.—(Original Patent, 13th February, 1858.)

11,934. The General Company of Railway Stock, represented by V. Hobin, of Molenbeek St. Jean, for "Solid sheet iron wheels with iron naves for railway carriages."—Dated 30th December, 1861.

11,935. Ad. Jansen, of Brussels, for "Bullets for smooth or rifled fire-arms."—Dated 30th December, 1861.

11,936. E. J. Hoorickx and H. Lekieffre, of Brussels, for "A machine for buddling ores on the spot."—Dated 30th December, 1861.

11,937. P. M. Bordes and V. J. Janssens, represented by E. Veldeman, of St. Gilles, Ixelles, for "A regulating press for blank stamps."—Dated 31st December, 1861.

11,938. Aug. Wolle, represented by W. H. Kirkpatrick, of Ixelles, for an imported invention of "Improvements in machines for the manufacture of paper bags or envelopes."—Dated 31st December, 1861.—(English Patent, 1st July, 1861.)

11,939. J. G. B. Salt, represented by W. H. Kirkpatrick, of Ixelles, for an imported invention of "Improvements in the manufacture of street plates, door plates, &c."—Dated 31st December, 1861.—(English Patent, 11th July, 1861.

11,940. J. B. Lambot, of Tamines-Namur, for "Transmitting motion applicable to fahrkunst (man-engines) and machines with oscillating rods for extracting ores."—Dated 31st December, 1861.

11,941. J. P. N. Ficher, of Liége, for "Fastening breech-loading guns."—Dated 31st December, 1861.

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THE

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No. 839. FRIDAY, JANUARY 17, 1862. Price 2d.

Applications for Letters Patent.

(14*th*, 15*th*, *and* 16*th January*, 1862.)

101. JOHN CARTER, of 20, Danvers Street, Paulton Square, Chelsea, in the county of Middlesex, Saddler and Harness Maker, for an invention of "An improved shaft tug or bearer used in harness."—Dated 14th January, 1862.

102. EBENEZER WILLIAM HUGHES, of Number 22, Parliament Street, in the city of Westminster, Civil Engineer, for an invention of "Improvements in engineering and architectural structures."—Dated 14th January, 1862.

103. JAMES PAINE, of the firm of Paine and Hough, of the city of Manchester, in the county of Lancaster, Woollen Merchant, for an invention of "Improvements in printing and ornamenting kamptulicon when applied to fabrics."—Dated 14th January, 1862.

104. JAMES JACK, of Liverpool, in the county of Lancaster, Engineer, for an invention of "An improvement in or application to cores for moulding or shaping metals."—Dated 14th January, 1862.

105. MATTHEW CHADWICK, of Radcliffe, in the county of Lancaster, Machine Maker, for an invention of "Improvements in machinery for folding or platting cloth and for measuring the same."—Dated 14th January, 1862.

106. WILLIAM GORSE, of Minworth, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in machinery for manufacturing the cut nails called brads."—Dated 14th January, 1862.

107. SAMUEL WILMER MARSH, of the city of Washington, in the district of Columbia, and United States of America, for an invention of "Improvements in breech loading fire-arms."—Dated 14th January, 1862.

108. THOMAS HARRISON, of Barmingham, Foreman on the Glebe Farm, and JOHN GEORGE HARRISON, of Kirby Ravensnorth, Blacksmith, both in the North Riding of Yorkshire, for an invention of "Improvements in ploughs."—Dated 14th January, 1862.

109. CHRISTOPHER HILL, of Ferryside, Kidwelly, in the county of Carmarthen, Coal Agent, for an invention of "Improvements in the manufacture of lubricating compounds."—Dated 14th January, 1862.

110. JOSIAH HARRIS, of Ess Hill House, Newton Abbot, in the county of Devon, for an invention of "A semaphore target marker."—Dated 14th January, 1862.

111. JAMES GARTH MARSHALL, of Leeds, in the county of York, Flax Spinner, for an invention of "Improvements in the machinery and processes for producing fibre from woven and other textile fabrics."—Dated 14th January, 1862.

112. EDWARD LORD, of Todmorden, in the county of York, Machine Maker, for an invention of "Improvements in or applicable to looms for weaving."—Dated 15th January, 1862.

113. WILLIAM CLELAND, of 39, St. George's Hill, Everton, Liverpool, in the county of Lancaster, for an invention of "Improvements in treating and utilizing certain materials used and products obtained in the manufacture of gas, and in apparatus connected with the said treatment."—Dated 15th January, 1862.

114. THOMAS TIMMINS, General Caster, of Birmingham, in the county of Warwick, and THOMAS SIMMONS, Doctor of Medicine, also of Birmingham aforesaid, for an invention of "A combination bath."—Dated 15th January, 1862.

115. JOSEPH RIDSDALE, of the Minories, in the city of London, Engineer, for an invention of "Improvements in preparing sheet lead for covering floors, stairs, and other like purposes."—Dated 15th January, 1862.

115. Henry Duncan Preston Cunningham, of Bury, near Gosport, in the county of Hants, Esquire, for an invention of "Improvements in means for protecting screw propellers from entanglement or being fouled by ropes or other bodies, also improvements in means for closing up the screw aperture."—Dated 15th January, 1862.

117. John Brooke, of Leeds, in the county of York, Engineer, for an invention of "Improvements in the form of lubricators."—Dated 16th January, 1862.

118. John Adams Knight, of No. 4, Symonds Inn, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "The application of a diamond cutter and improved machinery for operating the same for dressing millstones."—A communication to him from abroad by John Dickinson, of New York, United States of America.—Dated 16th January, 1862.

119. Edward Henry Cradock Monckton, of Fineshade, in the county of Northampton, Esquire, for an invention of "Improvements in apparatus for obtaining and applying motive power."—Dated 16th January, 1862.

120. Thomas Matanle, of No. 5, Wilmot Square, Bethnal Green Road, in the county of Middlesex, Brass Manufacturer, for an invention of "An improved runner fastening for umbrellas, parasols, sunshades, and other similar articles."—Dated 16th January, 1862.

121. William Tristram, of Bolton, in the county of Lancaster, Manufacturer, for an invention of "Certain improvements in power looms for weaving."—Dated 16th January, 1862.

122. Henry Wheatcroft, of 27, Fore Street, city of London, Manufacturer, for an invention of "Improvements in the manufacture of bonnet and cap fronts and similar fabrics."—Dated 16th January, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2473. To William Malam, of Skinner Street, in the city of London, Gas Engineer, for the invention of "Improvements in apparatus for the manufacture of gas."

On his petition, recorded in the Office of the Commissioners on the 3rd day of October, 1861.

2873. To William Leopard, of Hurstpierpoint, in the county of Sussex, Corn Merchant, for the invention of "Improvements in railway break apparatus."

On his petition, recorded in the Office of the Commissioners on the 14th day of November, 1861.

2986. To Hermann Brambach, of No. 11, Lungengasse, in the city of Cologne, Merchant, for the invention of "A new mode of manufacturing gas for illuminating purposes."

On his petition, recorded in the Office of the Commissioners on the 27th day of November, 1861.

3016. To Richard Cook and George Holme Spencer, of Hathersage, in the county of Derby, Manufacturers, for the invention of "Improvements in the manufacture of umbrellas and parasols."

On their petition, recorded in the Office of the Commissioners on the 29th day of November, 1861.

3019. To John Cooper, of St. Margaret's Iron Works, Ipswich, in the county of Suffolk, and Charles Garrood, of Penge, in the county of Surrey, for the invention of "Improvements in cultivators, horse hoes, and horse rakes."

On their petition, recorded in the Office of the Commissioners on the 30th day of November, 1861.

3055. To Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in printing and ornamenting textile fabrics, paper hangings, and other materials, and in surfaces and apparatus for such purposes."—A communication to him from abroad by Alexandre Adrien Despréaux, of 33, Boulevart Saint Martin, Paris, France.

On his petition, recorded in the Office of the Commissioners on the 5th day of December, 1861.

3096. To Thomas Higgins, of Bow, in the county of Middlesex, Tornographer, for the invention of "Improved machinery for filling dipping clamps with tapers, match stems, and splints."

On his petition, recorded in the Office of the Commissioners on the 10th day of December, 1861.

3103. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in stoppering bottles and other vessels."—A communication to him from abroad by Mr. Victor Hippolyte Solon, of 29, Boulevart St. Martin, Paris, Proprietor.

On his petition, recorded in the Office of the Commissioners on the 11th day of December, 1861.

3144. To Ferdinand Kohn, of No. 17, Southampton Terrace, Waterloo Bridge, London, for the invention of "An improved mode of copying writings, drawings, prints, and similar objects."

On his petition, recorded in the Office of the Commissioners on the 14th day of December, 1861.

3152. To George Prince Vallas, of No. 2, Kentish Town Road, Camden Town, in the county of Middlesex, Zinc Worker, for the invention of "Improvements upon or additions to certain description of portable baths, with the object of rendering them available for use as trunks or boxes."

On his petition, recorded in the Office of the Commissioners on the 16th day of December, 1861.

3160. To John William Chalfont, of No. 7, Denmark Grove, in the parish of Islington, in the county of Middlesex, Watch Maker, and David Keys, of No. 15, Craven Street, Strand, in the county of Middlesex, Watch Maker, for the invention of "Improvements in the method of, and apparatus for, winding up fusee watches and pocket chronometers, and setting the hands without key."

On their petition, recorded in the Office of the Commissioners on the 17th day of December, 1861.

3184. To Joseph Henry George Wells, of 2, Sandhurst Villas, Binfield Road, Stockwell, in the county of Surrey, Civil Engineer, for the invention of "Improvements in the method of, and apparatus for, pumping elastic fluids."

On his petition, recorded in the Office of the Commissioners on the 19th day of December, 1861.

3188. To John Smith, the younger, of Coven, in the county of Stafford, Engineer and Machinist, and John Birch Higgs, of Coven aforesaid, Engineer and Machinist, for the invention of "Improvements in thrashing machines and in mills for grinding, and in apparatus for raising or moving grain in granaries and other places."

3202. And to George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in machinery for attaching the soles of boots and shoes to the upper leathers."—A communication to him from abroad by Simon Smith Bucklin, a person resident at Brookline, Massachusetts, United States of America.

On both their petitions, recorded in the Office of the Commissioners on the 20th day of December, 1861.

3206. To William Bennetts, of Tuckingmill, Camborne, in the county of Cornwall, Engineer, for the invention of "Improvements in the mechanism required for and in the manufacture and composition of gunpowder."

3208. And to William Mattieu Williams, of Handsworth, in the county of Stafford, Teacher, for the invention of "An improvement or improvements in treating coal and other bituminous minerals and peat, in order to obtain solid and liquid hydro-carbons therefrom, and in apparatus to be used for that purpose."

On both their petitions, recorded in the Office of the Commissioners on the 21st day of December, 1861.

3222. To Thomas Edward Vickers, of Sheffield, in the county of York, Steel Manufacturer, for the invention of "Improvements in the wheels of railway engines and carriages, and in the machinery or apparatus to be used in making the same."

On his petition, recorded in the Office of the Commissioners on the 24th day of December, 1861.

3236. To Henry Dawes, of Sale Green, Sale Moor, near Manchester, in the county of Chester, Gentleman, for the invention of "Improvements in the method of treating steel for the manufacture of crinoline."

On his petition, recorded in the Office of the Commissioners on the 26th day of December, 1861.

3243. To Thomas William Atlee, Druggists Factor of Birmingham, in the county of Warwick, for the invention of "Certain improvements in cocks or taps for drawing off fluids."

3246. And to Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in steam generators, and in fire-bars employed therein."—A communication to him from abroad by Alexandre Friedmann and Emile D'Erlanger, both of Paris, France.

On both their petitions, recorded in the Office of the Commissioners on the 27th day of December, 1861.

3250. To Arthur Warner, of Threadneedle Street, in the city of London, for the invention of "Improvements in the manufacture of cases or receptacles for oil fuses and other articles used in the military and naval services."

On his petition, recorded in the Office of the Commissioners on the 28th day of December, 1861.

3260. To William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, for the invention of "Improvements in the manufacture of certain descriptions of woven looped and bobbin net fabrics by the application of certain fibrous materials thereto."

3262. To William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, for the invention of "Improvements in the manufacture of umbrellas and parasols."

3265. To Thomas Pickford, of Fenchurch Street, in the city of London, Merchant, for the invention of "Improvements in the manufacture of manure."

3268. To John Haslam, of Preston, in the county of Lancaster, for the invention of "Improved apparatus for winding, holding, and letting go cords, bands, or chains, particularly applicable to window blinds."

3270. And to William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improved apparatus for obtaining motive power from explosive compounds."— A communication to him from abroad by Eugène Barsanti and Felix Matteucci, of Florence, in the kingdom of Italy.

On their several petitions, recorded in the Office of the Commissioners on the 31st day of December, 1861.

1. To John Martin Rowan, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in the manufacture of railway wheels and in apparatus to be used therein."

3. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in hose pipe joints or couplings."—A communication to him from abroad by Thomas Braisted, of New York, in the United States of America.

5. To John Walker, of 25, City Road, in the county of Middlesex, Engineer, for the invention of "Improvements in the construction of forts and fortifications which are applicable to floating batteries."

6. To Thomas Charles Clarke, of Liverpool, in the county of Lancaster, Civil Engineer, for the invention of "Improvements in the construction of apparatus for heating and circulating water and other liquids."

7. To John Bradbury, of Pendleton, near Manchester, in the county of Lancaster, Mechanic, for the invention of "Improvements in self-acting mules."

9. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in supporting and propelling vessels."—A communication to him from abroad by Auguste Salzmann, of Paris, France.

10. To WILLIAM BUSH, of Tower Hill, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in omnibuses and other carriages."

13. To WILLIAM BARKER PATRICK, of Highgate, in the county of Middlesex, Gentleman, for the invention of "Improvements in the manufacture of sugar, and in the apparatus employed therein."

14. To EDMUND FRANCIS DAVIS, of Tavistock House, Tavistock Square, in the county of Middlesex, for the invention of "Improvements in gas burners."

16. And to WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in coffee pots and boilers for culinary purposes, part of which improvements are also applicable for generating steam."—A communication to him from abroad by Edward Fielding Woodward, of Brooklyn, King's county, state of New York, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 1st day of January, 1862.

18. To WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for the invention of "Improved apparatus for roasting coffee."—A communication to him from abroad by Jean Louis Rivret-Justin, of 15, Passage des Petites Ecuries, Paris, France, Merchant.

21. To MATTHEW CARTWRIGHT, of Carlisle, in the county of Cumberland, Dentist, for the invention of "Improvements in the manufacture of models and of plates' or 'pieces' for artificial teeth."

23. And to HERMANN ESCHWEGE, of 14, Mincing Lane, in the city of London, for the invention of "Improvements in treating wood and other vegetable spirit."

On their several petitions, recorded in the Office of the Commissioners on the 2nd day of January, 1862.

24. To EDWARD NUGENT, of Brooklyn, in the county of Kings and state of New York, United States of America, for the invention of "Improvements in fire-arms."

26. And to FRANÇOIS SÉBASTIEN BELLOCHE and HERMAN BOLLACK, of the firm of Bollack, Brothers, of 333, Rue St. Martin, Paris, in the empire of France, and of No. 42, Bridge Street, Blackfriars, London, for the invention of "An improved parasol."

On both their petitions, recorded in the Office of the Commissioners on the 3rd day of January, 1862.

29. To JAMES WHITTON ARUNDELL, of No. 265, Gresham House, Old Broad Street, in the city of London, Gentleman, for the invention of "An improved method and improved apparatus for removing impurities from coal, parts of which invention are applicable for the separation and cleansing of ore and other minerals."—A communication to him from abroad by Mr. Martin Neuerburg, residing at Kalk, Rhenish Prussia.

31. To CHRISTOPHER CROSS, of Stratford, near Manchester, and EDWARD PADMORE, of the city of Manchester, in the county of Lancaster, for the invention of "Improvements in the manufacture of piled fabrics and in machinery or apparatus employed therein."

33. To GEORGE LEYSHON, of Tividale, in the county of Stafford, Tinplate Assorter, and DAVID BECKLEY, of Brockmoor, in the county of Stafford, Grocer, for the invention of "An improvement or improvements in breaks for retarding and stopping carriages on railways."

37. And to ARTHUR WARNER, of No. 31, Threadneedle Street, in the city of London, Merchant, for the invention of "Improvements in preparing materials for and in purifying coal gas."

On their several petitions, recorded in the Office of the Commissioners on the 4th day of January, 1862.

40. To GEORGE BETJEMANN, GEORGE WILLIAM BETJEMANN, and JOHN BETJEMANN, of Pentonville, in the county of Middlesex, Desk and Dressing Case Manufacturers, for the invention of "Improvements in dressing cases, applicable to other cases and boxes."

41. To PATRICK BENIGNUS O'NEILL, of Hart Street, Bloomsbury, in the county of Middlesex, for the invention of "Improvements in screw wrenches or spanners."

43. And to FREDERICK BROWN, of the firm of Brown and Green, Ironfounders and Ironmongers, of Luton, in the county of Bedford, for the invention of "Improvements in kitchen ranges and cooking apparatus."

On their several petitions, recorded in the Office of the Commissioners on the 6th day of January, 1862.

45. To JAMES HIGGINS, of Salford, in the county of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for the invention of "Improvements in machinery or apparatus for spinning and doubling cotton and other fibrous materials."

48. And to ARTHUR WALLIS and CHARLES HASLAM of Basingstoke, in the county of Southampton Engineers and Ironfounders, for the invention of "Improvements in rotary screens."

On both their petitions, recorded in the Office of the Commissioners on the 7th day of January, 1862.

49. To DAVID BEALE, of No. 10, Cobden Street, Saint Leonard's Road, Bromley, in the county of Middlesex, Pattern Maker, for the invention of "An improved method of fastening iron plates to ships' sides."

51. To ANTHONY HEATH, of No. 12, Union Square, Islington, in the county of Middlesex, for the invention of "Improvements in the construction of inkstands."

53. To CHARLES PILKINGTON and THOMAS PILKINGTON, both of Sheffield, in the county of York, Joiners' Tool Manufacturers, for the invention of "Improvements in skates."

55. To JOHN STENHOUSE, of 11, Upper Brunswick Terrace, Barnsbury Road, in the county of Middlesex, Chemist, for the invention of "Improvements in rendering certain substances less pervious to air and liquids."

57. And to WILLIAM BRADSHAW, the younger, of Coventry, in the county of Warwick, Watch Maker, for the invention of "Improvements in watches."

On their several petitions, recorded in the Office of the Commissioners on the 8th day of January, 1862.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

17th January, 1862.

1821. William Savory and Paul Haines Savory, both of Gloucester, in the county of Gloucester, for an invention of "An improved winding apparatus particularly adapted for steam ploughing, winding at pits, quarries, and other such like purposes."—Dated 19th July, 1861.

1823. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "An improved method of propelling ships and other vessels by means of superheated steam."—A communication to him from abroad by Eugene Coulon, of Rouen, France. —Dated 19th July, 1861.

1829. William Price, of Lambeth, in the county of Surrey, Carpenter, for an invention of "Improvements in tools for cutting shives and other conical blocks."—Dated 20th July, 1861.

1830. Robert Thatcher, of Brook Mills, Oldham, in the county of Lancaster, Cotton Spinner, for an invention of "Improvements in lubricators for lubricating the various parts of machinery." —Dated 20th July, 1861.

1832. John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and John Buckley, of the same place, Overlooker, for an invention of "Improvements in machinery for spinning and doubling cotton and other fibrous materials."—Dated 20th July, 1861.

1836. Constantine Nicolaus Kottula, of Holborn, in the county of Middlesex, Soap Manufacturer, for an invention of "Certain new compositions to be used in the manufacture of soap." —Dated 22nd July, 1861.

1841. Joseph Beattie, of Lawn Place, South Lambeth, in the county of Surrey, Engineer, for an invention of "Improvements in arrangements in buildings and ships with a view to the extinguishment of accidental fire therein, and also the ventilation thereof."—Dated 22nd July, 1861.

1843. George Featherstone Griffin, of New Adelphi Chambers, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the permanent way of railways."—Dated 23rd July, 1861.

1862. Henry Cook, of Manchester, in the county of Lancaster, Gentleman, for an invention of "Improved apparatus for punching or marking the pattern cards used in weaving figured fabrics."— Dated 24th July, 1861.

1937. Francis Richmond and Henry Chandler, both of Salford, in the county of Lancaster, Agricultural Implement Makers, and William Barry Ritchie, of Belfast, in the county of Antrim, in Ireland, Merchant, for an invention of "An improved sack holder."—Dated 5th August, 1861.

2618. Frederick John Evans, of the Gas Works, Horseferry Road, in the city of Westminster, Gas Engineer, for an invention of "An improved mode of, and apparatus for, carburetting gases for the purpose of illumination."—Dated 19th October, 1861.

2662. John Cowpe Heaton and John Dean, both of Rotherham, in the county of York, for an invention of "Improvements in the construction of taps or cocks."—Dated 24th October, 1861.

2664. James Chesterman, of Sheffield, in the county of York, Manufacturer, for an invention of "Improvements in heating steel and iron, and in hardening and tempering steel, and in apparatuses employed therein."—Dated 24th October, 1861.

2756. James Wright, of 42, Bridge Street, Blackfriars, in the city of London, Civil Engineer, for an invention of "Improvements in the method of, and apparatus for, separating foreign matters from the droppings from carding machines, and for returning the residue thereunto."—A communication to him from abroad by James Fitton and Francis Edward Fullerton, of Cavendish, in the county of Windsor, in the state of Vermont, United States of America.—Dated 2nd November, 1861.

2826. William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, for an invention of "Improvements in processes for treating, preparing, and combing certain fibrous materials, and in the machinery or apparatus employed for these purposes."—Dated 11th November, 1861.

2842. William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, for an invention of "Improvements in the manufacture of printed yarns, and in the application of certain fibrous materials to the manufacture of certain descriptions of yarns and threads."—Dated 12th November, 1861.

2843. John Henry Johnson, of 47, Lincoln's Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the construction of steam or other vapour and water, or other liquid tight-joints."— A communication to him from abroad by Joseph Harrison, of Philadelphia, in the United States of America, Engineer.—Dated 12th November, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 15th January*, 1862, *inclusive.*)

13th January.

124. William Craft, of 12, Cambridge Road, Hammersmith, and Thomas Wilson, of Bradmore House, Chiswick, both in the county of Middlesex, for an invention of "Improvements in drawers and napkins so as to render the same waterproof."—Dated 14th January, 1859.

14th January.

129. William Henry Edward McKnight, of Lydiard House, near Swindon, co. Wilts, for an invention of "An upright-celled boiler applicable to all heating purposes by hot-water or other fluid."—Dated 15th January, 1859.

130. Polynice Auguste Viette, of No. 25, Faubourgh de Schaerbeek, near Brussels, a Major in the Service of His Majesty the King of the Belgians, for an invention of "Certain inks applicable for engraving and lithographic purposes."—Dated 15th January, 1859.

133. William Betts, of Wharf Road, City Road, in the county of Middlesex, Capsule Manufacturer, for an invention of "Improvements in the manufacture of capsules, and in the apparatus to be employed therein."—Dated 15th January, 1859.

227. John White, of Finchley, in the county of Middlesex, Surgeon, for an invention of "Improvements in means or apparatus to facilitate respiration under water, or under the influence of fire, or in other situations where an artificial supply of air may be required, part of which improvements is also adapted to facilitate movement in or upon the surface of water."—Dated 25th January, 1859.

15th January.

139. Pierre Amable de Saint Simon Sicard, of Paris, in the French empire, Chemist, for an invention of "An improved process and apparatus for converting cast iron into steel."—Dated 17th January, 1859.

147. William Newman, of Aston, near Birmingham, in the county of Warwick, Brassfounder, for an invention of "New or improved furniture for window and other blinds."—Dated 18th January, 1859.

190. Charles O'Hara, of Toronto, Canada West, but now residing at No. 4. Upper Seymour Street, Hyde Park, in the county of Middlesex, Esquire, for an invention of "Improvements in propellers for propelling steam boats, ships, and vessels."—Dated 21st January, 1859.

224. Rudolph Bodmer, of 2, Thaives Inn, Holborn, in the city of London, for an invention of "Improved resin and resinous substances."—A communication from Mr. Jean Creuseton, residing at Paris, in the empire of France.—Dated 25th January, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*13th January*, 1862.)

106. George Riley, of No. 12, Portland Place North, Clapham Road, in the county of Surrey, for an invention of "An improved false bottom for brewers', distillers', and vinegar makers' mash tubs."—Dated 15th January, 1855.

231. Henry Davis Pochin, of Salford, in the county of Lancaster, of the firm of Halliday, Pochin, & Co., Manufacturing Chemists, for an invention of "Improvements in the treatment of certain compounds of alumina, and the application of the same in printing, dyeing, tawing, paper making, and such like purposes."—Dated 30th January 1855.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March ,,
268	,, April to June ,,
291	,, July to September ,,
321	,, October to December ,,
345	A.D. 1854—January to March ,,
371	,, April to June ,,
399	,, July to September ,,
424	,, October to December ,,
451	A.D. 1855—January to March ,,
475	,, April to June ,,
505	,, July to September ,,
527	,, October to December ,,
553	A.D. 1856—January to March ,,
579	,, April to June ,,
605	,, July to September ,,
632	,, October to December ,,
660	A.D. 1857—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1858—January to March ,,
789	,, April to June ,,
815	,, July to September ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632	A.D. 1852—October to December inclusive
660	A.D. 1853—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1854—January to March ,,
789	,, April to June ,,
815	,, July to September ,,

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

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FOREIGN PATENTS.



FRANCE.

CURRENT LIST of PATENTS of Invention and Certificates of Addition.

1861.

(Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.)

NOTE.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

50,243. BARTHOMEUF, of Clermont, for "Foot-coverings."—Dated 6th July, 1861.

50,244. BÉCHARD, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the manufacture of bricks, &c."—Dated 27th June, 1861.

50,245. BOUDIN, of 38, Rue Ste. Croix de la Bretonnerie, Paris, for "Using photographic proofs in making and ornamenting screens, fans, shades, &c."—Dated 28th June, 1861.

50,246. CATTAERT, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kind of tray and tumblers."—Dated 28th June, 1861.

50,247. DUBOSQ, of 21, Rue de l'Odéon, Paris, for "A photographic album, called 'Travelling polieonograph.'"—Dated 28th June, 1861.

50,248. DUPUY, represented by Rieordeau, of 23, Boulevart de Strasbourg, Paris, for "A lithoehromic press."—Dated 27th June, 1861.

50,249. DURAND and CROZET, of 11, Rue de la Bourse St. Etienne, for "A system applieable to Jaequart looms for the manufacture of two pieces of ribbon instead of one, as done on common looms."—Dated 12th July, 1861.

50,250. DUVERNOY, of 174, Rue de Rivoli, Paris, for "A kind of enamel."—Dated 29th June, 1861.

50,251. GIPOULOUX, LAFON, DEPONS, and MOUNIER, of 51, Boulevart de Strasbourg, Paris, for "A gas furnaee, especially for heating steam-engines and loeomotives and steam-boats."—Dated 28th June, 1861.

50,252. GLATTARD, of Montauban, for "Applying electric galvanism to rosaries."—Dated 8th July, 1861.

50,253. GUILLEMONT and HEU, represented by Rieordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in schist lamps."—Dated 27th June, 1861.

50,254. HERMITE, represented by Mathieu, of 45, Rue St. Sebastien, Paris, for "Improvements in looms."—Dated 27th June, 1861.

50,255. KLEIN and GALLOIS, of 74, Rue de Bondy, and 11, Rue Neuve de Strasbourg, Paris, for "A ball for keeping eotton."—Dated 29th June, 1861.

50,256. LACOUR, of 44, Rue Martrou, Roehefort, for "Using gas, steam, and liquids for the tension of packings of pistons."—Dated 8th July, 1861.

50,257. LEGRAND, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Manufaeture of easks and barrels of sheet iron for alcohol, wine, &e."—Dated 27th June, 1861.

50,258. LOUIS, represented by Le Blanc, of 2, Rue Ste.-Appoline, Paris, for "Improvements in mounting umbrellas and parasols."—Dated 27th June, 1861.

50,259. MINICH, of 14, Rue des Amandiers, Paris for "A batten with a hook-shuttle."—Dated 29th June, 1861.

50,260. NOELLAT, of 54, Rue des Vinaigriers, Paris, for "Bellows."—Dated 29th June, 1861.

50,261. PAUVERT, of 5, Rue des Chapeliers, Nantes, for "Foot-coverings."—Dated 12th July, 1861.

50,262. PETIN, GAUDET, and Company, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the construction of armour-plates."—Dated 29th June, 1861.

50,263. PLANCHE and Company, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Manufaeture of tissues and shawls imitating Indian shawls."—Dated 27th June, 1861.

50,264. DE POLIGNAC, of 37, Rue Neuve-des-Mathurins, Paris, for "A steam engine with a curved eylinder."—Dated 29th June, 1861.

50,265. ROBERT and Company, represented by Rieordeau, of 23, Boulevart de Strasbourg, Paris, for "A self-aeting apparatus for tallow lubriea-tion."—Dated 27th June, 1861.

50,266. ROBIN, domiciled with Courtois and Aymard, of 25, Rue des Rosiers, Paris, for "A portable economical press."—Dated 27th June, 1861.

50,267. ROUSSEAU DE LAFARGE, of 4, Rue Rossini, Paris, for "A photographic apparatus for working in full light on wet eollodion, for rendering looking-glass sensible, and eompleting the proof in open sunshine."—Dated 28th June, 1861.

50,268. DE RUOLZ, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Silver alloys."—Dated 29th June, 1861.

50,269. SABATIER and HERPIN, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Bullen-nails."—Dated 27th June, 1861.

50,270. SCHLOSS and Nephew, represented by Guion, of 29, Boulevard St. Martin, Paris, for "A photographic pocket-book."—Dated 27th June, 1861.

50,271. TATON and DELRUE, Brothers, of Charleville, for "A eooling apparatus applicable to the manufacture of beer."—Dated 10th July, 1861.

* For the French Patent Law see No. 228 of this Journal.

50,272. Vaslin, of 44, Rue Mazarine, Paris, for "A multiplying apparatus with a variable angle (by reflection)."—Dated 28th June, 1861.

50,273. Aron, represented by Le Blanc, of 2, Rue Ste.-Appoline, Paris, for "Improvements in the manufacture of cravats with fastenings."—Dated 24th June, 1861.

50,274. Briard, of 21, Rue de Paris, Paris, for "Improvements in sepulchral garlands."—Dated 22nd June, 1861.

50,275. Brossard, of 8 and 10, Rue Crébillon, Nantes, for "A guide for hemming and edging applicable to all sewing machines."—Dated 13th July, 1861.

50,276. Cari-Mantrand, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Manufacture of waterproof varnish and paint for the destruction of insects."—Dated 2nd July, 1861.

50,277. Castanier, of 23, Rue de Condé, Lyon, for "A machine for beating and conglomerating all kinds of substances."—Dated 10th July, 1861.

50,278. Dormoy, of Rimaucourt, for "Manufacture of blades of knives on the rolling mill."—Dated 13th July, 1861.

50,279. Etiévant, of 95, Rue de Rome, Marseille, for "Continuous filtering of water with or without pressure."—Dated 12th July, 1861.

50 280. Filliatre, of 51, Rue Taitbout, Paris, for "Improvements in the boxes of kitchen stoves."—Dated 2nd July, 1861.

50,281. Fleury, of 9, Rue de la Chaussée, Havre, for "A machine for taking in jibs at sea."—Dated 13th July, 1861.

50,282. Gacher and Dekeyne, of 64, Rue Vieille-du-Temple, Paris, for "Linings for hats and caps."—Dated 1st July, 1861.

50,283. Gautier, represented by Bresson, of 51, Rue de Malte, Paris, for "A cigar case with a gas-lighting apparatus."—Dated 2nd July, 1861.

50,284. Gras, of Montenotte, Algeria, for "A machine for using atmospheric pressure in double action power of any motor, and without increasing the liquid."—Dated 3rd July, 1861.

50,285. Guerin, of 65, Rue de Richelieu, Paris, for "A pump with several pistons."—Dated 2nd July, 1861.

50,286. Guin and Bernard, of 69, Rue Haute-Monteaux, Marseille, for "A mode of preventing chimneys from smoking."—Dated 12th July, 1861.

50,287. Hatou, of Dôle, for "An apparatus for sorting grain."—Dated 12th July, 1861.

50,288. Hayem, represented by Le Blanc, of 2, Rue Ste.-Appoline, Paris, for "A combined shirt collar and cravat, called 'Wonderful plastron.'"—Dated 2nd July, 1861.

50,289. Larmanjat, of 24, Rue du Mail, Paris, for "Steam boilers."—Dated 1st July, 1861.

50,290. Leforestier, of 61, Rue Rambuteau, Paris, for "A so-called 'Swing-clock.'"—Dated 17th June, 1861.

50,291. Lirondelle and Morel, of Péronne, for "A tamkin for stamping letter."—Dated 11th July, 1861.

50,292. Malzac, of Place de la Visitation, Angers, for "Water-tight windows."—Dated 13th July, 1861.

50,293. Martin and Mottard, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A composition for preventing and removing incrustations of steam boilers."—Dated 2nd July, 1861.

50,294. Maurice, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "An apparatus for harvesting and mowing."—Dated 2nd July, 1861.

50,295. Michel, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A pump applicable to navigation, manufactures, fire engines, draining, &c."—Dated 2nd July, 1861.

50,296. Neufelder, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of clasps for albums, prayer books, ledgers, &c."—Dated 29th June, 1861.

50,297. Pouchet and Grimaux, of 18, Rue Bonaparte, Paris, for "Applying Patent or other processes used in the manufacture of artificial ice to the formation of a sheet of ice for skating, sledging, and similar amusements."—Dated 1st July, 1861.

50,298. Proust of 11, Rue Contrescarpe, Nantes, for "Improvements in clocks."—Dated 13th July, 1861.

50,299. De Richoufftz, of 38, Rue Bellefond, Paris, for "A kind of glasses for lamps."—Dated 2nd July, 1861.

50,300. Rosenfeld, of 4, Rue des Rosiers, Paris, for "A loto-game of the history of France."—Dated 1st July, 1861.

50,301. Sarazin, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A portable hand apparatus for mincing meat and vegetables, &c."—Dated 2nd July, 1861.

50,302. Schaal, of 7, Rue Jouffroy, Lyon, for "A machine for washing skeins of thread."—Dated 11th July, 1861.

50,303. Testé, of 8, Rue Crebillon, Nantes, for "A mechanical musical instrument called 'Cartonium with pipes.'"—Dated 13th July, 1861.

50,304. Toulotte, of 38, Rue de la Roquette, Paris, for "A syphon steelyard with internal divisions."—Dated 2nd July, 1861.

50,305. Alluys, of 12, Rue des Bourdonnais, Paris, for "So-called 'Elæocere paint' for preserving iron for all purposes."—Dated 3rd July, 1861.

50,306. Angebault-Justeau, of Avenue de la Gare, Ancenis, for "Manufacture of marbled bricks."—Dated 15th July, 1861.

50,307. Arnaud, Sons, of Sommières, for "A lift pump for cellars and wine tubs."—Dated 13th July, 1861.

50,308. Beardslee, represented by Perpigna, of 13, Rue du Cherche-Midi, Paris, for "Improvements in electro-magnetic, electro-motive, or other engines."—Dated 26th June, 1861.

50,309. Benazeth and Compy., of 11, Rue de la Palud, Marseille, for "A machine for draining and industrial purposes."—Dated 15th July, 1861.

50,310. Bineau, of 25, Rue Saint Martin, Tours, for "Jointed garden seats."—Dated 13th July, 1861.

50,311. Bourdin, of Amberre, for "A machine for thrashing and winnowing grain."—Dated 17th July, 1861.

50,312. Bourgeois, of Maizeville, for "An apparatus for washing smoke."—Dated 16th July, 1861.

50,313. Bourrel, of 31, Rue St. Rome, Toulouse, for "Vegetable linings adhesive to hats."—Dated 13th July, 1861.

50,314. Chenevier, of St. Quentin, for "A tool for closing cartridges of breech-loading guns."—Dated 16th July, 1861.

50,315. Delattre, Father and Sons, of Roubaix, for "An anti-shuttle apparatus."—Dated 18th July, 1861.

50,316. Deru, jun., represented by Girard, of 96, Rue de Bondy, Paris, for "An apparatus for oiling wool."—Dated 3rd July, 1861.

50,317. Didace, of Tonnerre, for "A moderator of escapements of locomotive engines."—Dated 22nd June, 1861.

50,318. Edwards, represented by Ferrolier, of Hôtel de l'Europe, Chambéry, for "Traction on railways, tramways, and other roads."—Dated 11th July, 1861.

50,319. Giffard, of Novalaise, for "A thrashing machine."—Dated 17th July, 1861.

50,320. Guary, domiciled with Evrard, of 23, Rue Samson, Douai, for "A variable equilibrium obtained by means of compressed air."—Dated 17th July, 1861.

50,321. Hautot, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A model of the various operations in coal pits for public demonstrations."—Dated 3rd July, 1861.

50,322. Howorth-Edwards, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "An atmospheric engine."—Dated 3rd July, 1861.—(English Patent, 7th December, 1860.)

50,323. Leclerc, of Briey, for "Carriages."—Dated 16th July, 1861.

50,324. Leprohon-Bolvin, represented by Ducarne, of Lille, for "A mode of putting bread into the oven, and of manufacturing the same."—Dated 19th July, 1861.

50,325. Lies-Bodart, Professor of Chemistry, of the Faculty of Strasbourg, for "Using gluten for preserving alimentary substance."—Dated 15th July, 1861.

50,326. Malle, of Libourne, for "Spatterdashers."—Dated 15th July, 1861.

50,327. Mauvage, of Héry, for "A machine for moulding bricks, tiles, and flagstones."—Dated 17th July, 1861.

50,328. Michallon, of 23, Rue Valbenoit, St. Etienne, for "Breech loading fire-arms."—Dated 13th July, 1861.

50,329. Miel, of 69, Rue St. Martin, Paris, for "Counters for games."—Dated 3rd July, 1861.

50,330. Muret, represented by Amouret, of 333, Rue St. Martin, Paris, for "Secret spring fastenings of pockets of men's and women's dresses."—Dated 3rd July, 1861.

50,331. Palazot, of 131, Route d'Espagne, Bordeaux, for "Means of consuming the smoke of steam boilers."—Dated 13th July, 1861.

50,332. Roux, of 16, Rue Dos d'Ane, Nantes, for "Cones and journals with two keys, applicable to thrashing machines."—Dated 15th July, 1861.

50,333. Skawinski, of Labarde, for "A plough for vineyards."—Dated 13th July, 1861.

50,334. De Surmont, of 6, Rue de Béthune, Lille, for "An apparatus for removing plates or dishes from ovens, kitchen ranges, &c."—Dated 17th July, 1861.

50,335. Tourneur, of St. Pierre lès Calais, for "A mode of obtaining shades in open worked tissues."—Dated 15th July, 1861.

50,336. Vigé, of St. Paul les Dax, for "Smoking-pipes with grates."—Dated 13th July, 1861.

50,337. Bonod, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the manufacture of albums."—Dated 6th July, 1861.

50,338. Carpenter, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "An adjuster for adjusting the backs of waistcoats and trousers, which said adjuster may also be used as a substitute for the fastenings ordinarily employed in fastening gloves, garters, and belts."—Dated 4th July, 1861.—(English Patent, 28th July, 1860.)

50,339. Chataigneau, senr., of 77, Boulevart Mont Parnasse, Paris, for "An electrical escapement for stopping the motion of engines."—Dated 22nd June, 1861.

50,340. Colombat, of 13, Rue des Beaux Arts, Paris, for "An oyster stand."—Dated 4th July, 1861.

50,341. David, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in capstans heaving indefinitely, with several turns of rope, and without stoppering or surging."—Dated 3rd July, 1861.

50,342. Deckherr, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in drying timber."—Dated 3rd July, 1861.

50,343. Fisher, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Sewing machines."—Dated 6th July, 1861.

50,344. Gacher and Durif, of 115, Rue du Faubourg St. Antoine, 14, Cour de la Bonne-Graine, and 35, Rue de Penthièvre, Paris, for "Compressing trusses."—Dated 5th July, 1861.

50,345. Gompertz, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A toy."—Dated 6th July, 1861.

50,346. Gruyelle, represented by Ricordeau, of 25, Boulevart de Strasbourg, Paris, for "Cartridges with moveable bottoms."—Dated 3rd July, 1861.

50,347. Hardellet, of 257, Rue du Faubourg St. Martin, Paris, for "Improvements in the manufacture of galoshes."—Dated 8th July, 1861.

50,348. Hillaire, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in apparatus for winding up thread and glazed twine." —Dated 3rd July, 1861.

50,349. Jardin, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "A mode of controlling goods and products."—Dated 8th July, 1861.

50,350. Jeuniaux, represented by Bradc, of 29, Rue Ste. Anne, Paris, for "Ornamenting combs for the nape."—Dated 4th July, 1861.

50,351. Joalland, domiciled with Bourdin, 23, Rue d'Angoulême, Paris, for "Means of reloading cartridges of Lefaucheux' guns."—Dated 4th July, 1861.

50,352. Lamory, of 34, Rue du Chevalaret, Paris, for "A smoke-consuming apparatus."—Dated 6th July, 1861.

50,353. Lebrun-Virloy, of 9, Rue Pigalle, Paris, for "Drying and carbonizing wood and peat."—Dated 8th July, 1861.

50,354. Leprince, of 7, Rue Vivienne, Paris, for "Letter paper that may be used as a tamkin."—Dated 8th July, 1861.

50,355. Leroux, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Metallic joints for assembling pipes, plates, and for other purposes."—Dated 3rd July, 1861.

50,356. Loubére and Poinsignon, of 3, Rue Suger, Paris, for "Opening photographic albums,"—Dated 4th July, 1861.

50,357. Madre, of 4, Rue d'Enghien, Paris, for "An apparatus for fixing pages."— Dated 9th July, 1861.

50,358. Mallet, represented by Bresson, of 51, Rue de Malte, Paris, for "Improvements in percussion guns for children."—Dated 6th July, 1861.

50,359. Pasteur, of the Ecole Normale, Paris, for "Manufacture of acetic acid."—Dated 9th July 1861.

50,360. Péan, of 92, Rue du Faubourg du Temple, Paris, for "Improvements in tops."—Dated 8th July, 1861.

50,361. Penet, of 37, Grande Rue de Reuilly, Paris, for "Printing varnish of any colour on paper."—Dated 9th July, 1861.

50,362. Pioger, of 104, Rue de l'Empereur, Paris, for "An argentiferous composition obtained by means of chloride of silver and solid cupriferous composition obtained by means of nitrate and other salts of copper."—Dated 9th July, 1861.

50,363. Rey, of 168, Rue de Charenton, Paris, for "Chains with paddles and wheels, applicable to steam vessels."—Dated 6th July, 1861.

50,364. Sénéchal, represented by Amouroux, of 333, Rue St. Martin, Paris, for "Piston stoppers." —Dated 9th July, 1861.

50,365. Simon, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the construction of fire-places of fire boxeslid." —Dated 3rd July, 1861.

50,366. Stautz and Compy., represented by Guion, of 29, Boulevart St. Martin, Paris, for "Clasps for leather articles and books." —Dated 4th July, 1861.

50,367. Trouvé, of 33, Boulevart d'Ivry, Paris, for "A railway."— Dated 4th July, 1861.

50,368. Wawra, junr., represented by Dr. Schwartz, of 21, Rue Laffitte, Paris, for "Means of compressing and reducing flour and other non-alimentary substances into a hard and solid body by means of pressure, evacuation, and heat."—Dated 5th July, 1861.

50,369. Amoignon, of 92, Rue St. Victor, Paris, for "A machine for destroying commercial and other papers."—Dated 10th July, 1861.

50,370. Belloir and Company, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the construction of chairs, armchairs, divans, &c."—Dated 10th July, 1861.

50,371. Bernier, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in apparatus for making coffee, tea, &c."—Dated 10th July, 1861.

50,372, Bernier and Arbey, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in tool-engines for working wood."—Dated 10th July, 1861.

50,373. Bignoneau, sen., represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A machine for the manufacture of the wood of brushes applicable to the manufacture of similar objects."—Dated 10th July, 1861.

50,374. Blonde and Cassabois, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A preserving passe-partout frame."—Dated 10th July, 1861.

50,375. Bréguet, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in electrical batteries."—Dated 10th July, 1861.

50,376. Cogiola-Hermann, represented by Castelbon, of 15, Passage des Petites-Ecuries, Paris, for "Concentrated essence for bitters or essence for bitters."—Dated 10th July, 1861.

50,377. Foucault represented by Guion, of 29, Boulevart Saint Martin, Paris, for "Stage arrangements."—Dated 10th July, 1861.

50,378. Huber, of 32, Rue de Bondy, Paris, for "A clasp of parasols."—Dated 11th July 1861.

50,379. Irrmann, domiciled with Guillot, 38, Rue de l'Ecole, Paris, for "A suction ventilator."—Dated 10th July, 1861.

50,380. Isoard, jun., represented by Guion, of 29, Boulevart St. Martin, Paris, for "Counters for liquids."—Dated 9th July, 1861.

50,381. Itzengré and Sulzberger, represented by Thirion, of 95, Boulevart Beaumarchais, Paris, for "A board for washing linen."— Dated 9th July, 1861.

50,382. Klein, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A photographic album with moveable frames."—Dated 10th July, 1861.

50,383. Ledoux, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in knobs of locks."—Dated 10th July, 1862.

50,384. LEYRIS, of 34, Rue Singer, Quartier de Passy, Paris, for "Means of obtaining hydrogen gas."—Dated 11th July, 1861.

50,385. LOBEREAU and MEURGEY, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Manufacture of Portland cement by means of calcareous earth with weak bases of clay and by immersion after baking."—Dated 10th July, 1861.

50,386. LOBEREAU, jun., and MEURGEY, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Manufacture of Roman cement."—Dated 10th July, 1861.

50,387. LUCK, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "A table or piece of furniture that may be used for the same at bagatelle, and for similar purposes."—Dated 11th July, 1861.—(English Patent, 5th January, 1861.)

50,388. MONCKTON, represented by Brade, of 29, Rue Ste. Anne, Paris, for "Improvements in obtaining and applying magnetic motive power, being also applicable to other purposes."—Dated 10th July, 1861.—(English Patent, 25th May, 1861.)

50,389. MUSCELLA, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "An economical system of raising vessels above the level of water, and of lowering them to the surface."—Dated 10th July, 1861.

50,390. OLIER, of 13, Rue de la Banque, Paris, for "Improvements in safety paper for opaque cards that cannot be undoubled, as patented 6th December, 1860.—Dated 10th July, 1861.

50,391. PRAVET, of Rue de Tournon, Paris, for "A toy called 'Mechanical chariot.'"—Dated 12th July, 1861.

50,392. RATTE, represented by D'Aubreville, of 60, Boulevart de Strasbourg, Paris, for "A fishing tackle."—Dated 10th July, 1861.

50,393. RATTRAY, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in the means of preserving organic substances."—Dated 11th July, 1861.—(English Patent, 8th January, 1861.)

50,394. RONGIER, of 23, Rue de Richelieu, Paris, for "A sanitary mattress."—Dated 11th July 1861.

50,395. SALOMON, of 14, Rue Ste. Foy, Passage Aubert, Paris, for "Artificial manufacture of azotic acid and applying its steam to the economical manufacture of saltpetre and processes and apparatus applied thereto."—Dated 10th July, 1861.

50,396. SORIN, of 31, Rue des Fossés-Montmartre, Paris, for "A machine for refining and separating vegetable fibres."—Dated 10th July, 1861.

50,397. STEINHOFER, represented by Castelbon, of 15, Passage des Petites-Ecuries, Paris, for "A machine for utilizing the steam of an engine with a direct action."—Dated 10th July, 1861.

50,398. TOULOUSE. of 5, Rue Guénégaud, Paris, for "A kind of night lights."—Dated 11th July, 1861.

50,399. VITROU, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A support called 'Tubular horse's head,' for rollers of spinning, twisting, and other frames."—Dated 11th July, 1861.

50,400. WIESNEGG, of 4, Place Sorbonne, Paris, for "Arrangements for obtaining coloured flames."—Dated 11th July, 1861.

50,401. AIKEN, represented by Guion, of 29, Boulevart St, Martin, Paris, for "Knitting frames."—Dated 13th July, 1861.

50,402. BEAUJOUAN, of Bourges, for "Applying hollow iron to the construction of thrashing machines."—Dated 19th July, 1861.

50,403. BELFIELD, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in harvesting and mowing machines."—Dated 13th July, 1861.

50,404. BÉLUGEON, of Sentier du Dessous des Berges, Paris, for "A disinfecting apparatus for melting fat substances."—Dated 13th July, 1861.

50,405. BESANÇON, of 34, Quai Fulchiron, Lyons, for "Improvements in brass instruments with mouthpieces."—Dated 13th July, 1861.

50,406. BIGUET and FALKOWSKI, of 50, Haute Grande Rue, and 3, Avenue des Folies-Chaillon, Nantes, for "Equipoised suspension, applicable to naval and other instruments."—Dated 19th July, 1861.

50,407. BLADINAIRE, of 24, Rue Poissonnière, Paris, for "A mechanical awning for gardening."—Dated 15th July, 1861.

50,408. BONEAT and LHOPITAL, of 21, Rue Gabrielle, Paris, for "Taps."—Dated 15th July, 1861.

50,409. BONNETT, jun., of Oppède, for "Spinning silk."—Dated 19th July, 1861.

50,410. CHAUVIN, sen., of Aups, for "An economical thrashing cylinder."—Dated 22nd July, 1861.

50,411. CLÉMENT, of Loudun, for "A mechanism for jewellers and clockmakers."—Dated 19th July, 1861.

50,412. CLÉMENT and CROZY, of 106, Rue de la Guillotière, Lyon, for "An hydraulic counter."—Dated 17th July, 1861.

50,413. COINTE, of Boves, for "An apparatus for cleaning aud husking grain."—Dated 16th July, 1861.

50,414. D'ARDENNE, of Villefranche, for "A machine for husking trefoil, sainfoin, &c."—Dated 13th July, 1861.

50,415. DAVID, of 30, Rue du Grand-Puits, Marseille, for "An hydraulic match case."—Dated 19th July, 1861.

50,416. DELCAMBRE, of Denain, for "Manufacture of iron for shoeing horses and cattle."—Dated 22nd July. 1861.

50,417. DELPIERRE, of 4, Rue St. Denis, Paris, for "Arrangements, discoveries, and improvements in the manufacture of half-boots."—Dated 15th July, 1861.

50,418. DUMONT-CARMENT, of Amiens, for "An instrument for loading balls."—Dated 18th July, 1861.

50,419. DUPUY, of Rue de l'Arc-en-Ciel, Montplaisir, near Lyons, for "Applying the residue of

suds of dye-works, precipitated by a metallic salt and lime and various insoluble soaps, to the manufacture of conglomerated coal."—Dated 17th July, 1861.

50,420. FOUQUET, of 18, Grand Rue de Vaux, Vitry-le-Français, for "An apparatus for threading needles."—Dated 19th July, 1861.

50,421. GALLAND and VRIDAUD, of Ruffec, for "An apparatus for preserving corn and feculent vegetables."—Dated 15th July, 1861.

50,422. JORDAN, represented by Bradc, of Paris, for "Improvements in the construction of vessels."—Dated 12th July, 1861.

50,423. LIBERT, sen., represented by Thirion, of 95, Boulevart Beaumarchais, Paris, for "Ironing felt hats, tresses, hair, or wood."—Dated 12th July, 1861.

A FREE LIBRARY and READING ROOMS are open to the Public daily, from 10 till 4 o'clock, at the Office of the Commissioners of Patents, 25, Southampton Buildings.

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The Commissioners have to acknowledge the following presentations of books and papers received since the last notice :—

From the MINISTER of AGRICULTURE, COMMERCE, and PUBLIC WORKS, France :
Description des Machines et Procédés, &c. Tome 37, *et seq.*

From the TRUSTEES of the ASTOR LIBRARY, NEW YORK :
Catalogue of the Astor Library. New York, 1857-61.

From the AUTHOR :
The Free-trade Question. Translated by AKERSON. Lond. 1861.

From W. CARPMAEL, Esq. :
The Law of Patents. 6th Edition. Lond. 1860.

From the COUNCIL of the INSTITUTION of CIVIL ENGINEERS :
Minutes of Proceedings. Vol. 8, for 1849.

From HYDE CLARKE, Esq. :
On Copper-Smelting. Lond. 1858.

From ZERAH COLBURN, Esq. :
The Engineer, Nos. 1—20. Philadelphia, 1860.

From JOHN CORYTON, Esq. :
Letters on the Bible Monopoly. By JOHN CAMPBELL, D.D. London, 1841.

From GEORGE B. CULLERNE, Esq. :
Collection of Prospectuses of Bubble Companies issued in 1825.

From H. DIRCKS, Esq. :
On the Combustion of Coal and the Prevention of Smoke. By C. W. WILLIAMS. London, 1854. 8vo.

From the LIBRARY COMMITTEE of the CORPORATION of LONDON :
Catalogue of the Library of the Corporation of London, and Supplement. London, 1859-60.

From E. J. REED, Esq. :
Transactions of the Institution of Naval Architects. London, 1860.

From the REGENTS of the UNIVERSITY of NEW YORK :
Catalogues of the New York State Library.
Annual Reports of the Trustees of the New York State Library.
Documents relating to the Colonial History of the State of New York. Vol. 2, 8, and 10.
Census of the State of New York, 1855.
Senate Documents, 1856-8.
Senate Journal, 1857-8.
Assembly Documents, 1856-8.
Transactions of the New York State Agricultural Society, &c., 1856.
Laws of the State of New York, 1856-8.

From the SMITHSONIAN INSTITUTION :
Meteorology in its Connection with Agriculture. By Prof. Jos. HENRY.
Reply to the Statement of the Trustees of the Dudley Observatory. By B. APTHORP GOULD, jun.
Smithsonian Reports, 1857-8.
Smithsonian Contributions to Knowledge, Vols. 2—12. Washington, 1851-60.

From the COUNCIL of the SOUTH WALES INSTITUTE of ENGINEERS :
Transactions of the South Wales Institute of Engineers. Vol. I. Parts 1—4.

From WILLIAM SPENCE, Esq. :
Look to your Provisional Specifications. 2nd Edition. Lond. 1861. Four copies.

From A. TOLHAUSEN, Esq. :
Album für Erinnerung, &c.

From the UNITED STATES PATENT OFFICE :
Reports of the Commissioner of Patents, 1857-9.

From the WURTEMBERG GOVERNMENT :
Jahresberichte der Handels- und Gewerbekammern in Wurtemberg für 1852. Stuttgart, 1860.
Gewerbeblatt aus Wurtemberg. 10 Band. 1860.

From the COUNCIL of the ZOOLOGICAL SOCIETY of LONDON :
Proceedings of the Society. Part 2. 1861.

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No. 840. TUESDAY, JANUARY 21, 1862. Price 2d.

Applications for Letters Patent.

(*17th, 18th, and 20th January*, 1862.)

123. THOMAS MYERS, of 41, Bloomsbury Square, in the county of Middlesex, and EDWARD MYERS, of 56, Millbank Street, Westminster, for an invention of "Preventing rust on bright steel, iron, brass, or metal surfaces."—Dated 17th January, 1862.

124. ROBERT DUNLOP, of Cwm Avon Taibach, in the county of Glamorgan, Accountant, for an invention of "Improved means for facilitating calculations."—Dated 17th January, 1862.

125. JOHN MARTIN ROWAN, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in the construction of steam hammers."—Dated 17th January, 1862.

126. BARROW MOSS, of Liverpool, in the county of Lancaster, Merchant, for an invention of "The application of certain material or a mixture of such material with clay or substances, and for the manufacture therefrom of bricks, fire blocks, and so forth, applicable to the construction of iron furnaces, copper smelting furnaces, and other metallurgical operations, glass house sieges for pots, and glass houses, and for the linings of furnaces, also for the manufacture of crucibles for the melting of brass and other purposes."—Dated 17th January, 1862.

127. NATHAN THOMPSON, of 55, St. Paul's Road, Camden Town, in the county of Middlesex, for an invention of "Improvements in apparatus for stopping bottles."—Dated 17th January, 1862.

128. JULIUS CÆSAR DICKEY, of Saratoga Springs, county of Saratoga and state of New York, United States of America, for an invention of "An improved quartz crusher."—Dated 17th January, 1862.

129. ROBERT ROMAINE, of Devizes, in the county of Wilts, Agricultural Engineer, for an invention of "Improvements in apparatus to be used in cultivating land by steam power, and in steam boilers used for agricultural and traction purposes."—Dated 17th January, 1862.

130. JOHN TOW, of Poland Street, Oxford Street, in the county of Middlesex, Ironmonger, for an invention of "Improvements in the construction of stoves or fire places."—Dated 18th January, 1862.

131. THOMAS EMMOTT, of the Vale Mills, Oldham, in the county of Lancaster, Manufacturer, and JOSEPH TRAVIS, of the same place, Salesman, for an invention of "Improvements in the manufacture of velvets, velveteens, and other similar piled fabrics."—Dated 18th January, 1862.

132. THOMAS NEWTON, of the city of Manchester, in the county of Lancaster, Gun and Rifle Manufacturer, for an invention of "Improvements in sights for rifles."—Dated 18th January, 1862.

133. EDWARD DAVIES, of Warrington, in the county of Lancaster, Gentleman, for an invention of "Improvements in apparatus for gauging and cutting soap."—Dated 18th January, 1862.

134. WILLIAM HELME, of Caldbeck, in the duchy of Cumberland, for an invention of "A newly invented fire-lighter."—Dated 18th January, 1862.

135. JAMES JOHN STEVENS, of Darlington Works, Southwark, in the county of Surrey, for an invention of "Improvements in 'point' indicators for railways."—Dated 18th January, 1862.

136. WILLIAM TICE, of 16, Downham Road, Islington, in the county of Middlesex, for an invention of "Improvements in gas regulators and other apparatus in which moveable spindles are employed."—Dated 18th January, 1862.

137. Samuel Dreyfous, of Paris, France, Civil Engineer, for an invention of "An improved throstle spinning frame."—A communication to him from Monsieur Charles Leyherr, a person resident at Laval, France.—Dated 18th January, 1862.

138. William Louis Winans, of Baltimore, Maryland, United States of America, but now residing at Brighton, in the county of Sussex, and kingdom of England, Civil Engineer, for an invention of "Improvements in the manner of mounting and apparatus for manœuvring cannon or ordnance on ships or vessels of war and floating batteries."—Dated 18th January, 1862.

139. Thomas Roberts and John Dale, of Manchester, in the county of Lancaster, Manufacturing Chemists, for an invention of "Improvements in the manufacture of gunpowder."—Dated 18th January, 1862.

140. Walter Sandell Mappin, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "A new or improved lock."—Dated 20th January, 1862.

141. Léonard Barbat, of 2, Rue Sainte-Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention of "Some improvements in the manufacture of hats, bonnets, and other like articles."—Dated 20th January, 1862.

142. Thomas Holt, of Edward Street, Blackfriars Road, in the county of Surrey, Bedstead Manufacturer, for an invention of "Improvements in folding iron chairs and chair bedsteads."—Dated 20th January, 1862.

143. Thomas William Jobling, of Point Pleasant, in the county of Northumberland, Colliery Viewer and Mining Engineer, for an invention of "Improvements in the adaptation of locomotive engines to traction or haulage in mines."—Dated 20th January, 1862.

144. William Boaler, of Manchester, in the county of Lancaster, Merchant, for an invention of "Certain improvements in the method of sizing paper yarns and woven fabrics, and in machinery or apparatus connected therewith."—A communication to him from abroad by John Adams Rhodes, of Providence, Rhode Island, United States of America.—Dated 20th January, 1862.

145. Andrew Lamb, of Southampton, and John White, of West Cowes, Isle of Wight, for an invention of "Improvements in life boats."—Dated 20th January, 1862.

146. Joseph Bird, of Blidworth, in the county of Nottingham, Farmer and Miller, for an invention of "An improved crank axle applicable to cranks of any description whatsoever wherein the wear is mainly on one side thereof."—Dated 20th January, 1862.

147. Edward Chambers Nicholson, of The Atlas Works, Locksfields, in the county of Surrey, Manufacturing Chemist, for an invention of "Improvements in the preparation of colours suitable for dyeing and printing."—Dated 20th January, 1862.

148. John Washington Agnew, of the city of London, in West Canada, but at present of Windsor Chambers, Great Saint Helens, in the city of London, Gentleman, for an invention of "An adjusting last."—A communication to him from abroad by Samuel Slater, of the city of London, in West Canada aforesaid.—Dated 20th January, 1862.

149. Robert Ogden Doremus and Bern. L. Budd, of New York, United States of America, Chemists, for an invention of "Making cartridges."—Dated 20th January, 1862.

Notices to Proceed.

Notice is hereby given, that

2257. James Smith, of Saddler's Place, London Wall, in the county of Middlesex, Machinist, has given notice at the office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in sewing machines."

As set forth in his petition, recorded in the said office on the 10th day of September, 1861.

2269. And William Williams Clay, Machinist, in the employ of Mr. John Scott Wells, of Nottingham, Hosiery Manufacturer, has given the like notice in respect of the invention of "Improvements in knitting machinery."

As set forth in his petition, recorded in the said office on the 12th day of September, 1861.

2272. And William Davis, of Snow Hill, Birmingham, in the county of Warwick, Dyer, has given the like notice in respect of the invention of "An improved apparatus for the prevention of accidents to vehicles drawn by affrighted horses."

2273. And William Farlar, of Turnham Green, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in sash fastenings, which improvements are also applicable to other purposes."

2276. And Robert Smith, of Weymouth Cottage, Hornsey, Benjamin Brooks, of 2, Albert Terrace, York Road, King's Cross, and James Smith, of 2, Oak Villas, Wood Green, Tottenham, all in the county of Middlesex, Builders, have given the like notice in respect of the invention of "Improvements in the construction of roof and other lights."

2279. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in machines for weighing and measuring corn and other grain."—A communication to him from abroad by Joseph Alexander Auguste Catenot, of Lyons, France.

2282. And Charles Sutton, of Salford, in the county of Lancaster, Rope and Twine Manufacturer, has given the like notice in respect of the invention of "An improved method of and apparatus for indicating the position of sunken ships or other vessels."

2283. And Henry Dixon, of Pendleton, in the county of Lancaster, Gentleman, and John Robinson Renner, of Liverpool, in the said county, Artificial Manure Manufacturer, have given the like notice in respect of the invention of "Im-

provements in the mode of and apparatus for carbonizing sawdust and other vegetable substances."
As set forth in their respective petitions, all recorded in the said office on the 13th day of September, 1861.

2288. And RICHARD WALLER, of 50, Baker Street, Portman Square, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in machinery and apparatus for manufacturing and refining cane juice and other saccharine substances."

2289. And WILLIAM WHEATSTONE, of 20, Conduit Street, St. George's, Hanover Square, in the county of Middlesex, Music Instrument Maker, has given the like notice in respect of the invention of "Improvements in concertinas and other musical instruments, the tones of which are produced from the vibration of springs."

2292. And FREDERIC BARNETT, residing at No. 60, St. Mary Axe, in the city of London, has given the like notice in respect of the invention of "Improved automatic electric signals to prevent collisions on railroads and railways."
As set forth in their respective petitions, all recorded in the said office on the 14th day of September, 1861.

2300. And SAMUEL HORSLEY and EDWARD HOBSON JONES, both of Liverpool, in the county of Lancaster, Engineers, have given the like notice in respect of the invention of "Improvements in apparatus for cleaning and polishing boots, shoes, and other coverings for the feet, partly applicable for cleaning plate and other articles of domestic use."

2302. And WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agents, has given the like notice in respect of the invention of "Improved apparatus for drying grain."—A communication to him from abroad by Casimir Druart, of No. 15, Passage des Petites Ecuries, Paris, France.

2304. And THOMAS MERITON, of Second Bernard Strasse, Saint Pauli, Hamburgh, has given the like notice in respect of the invention of "Improvements in steering apparatus."

2313. And WESTON TUXFORD, of Boston, in the county of Lincoln, Engineer, has given the like notice in respect of the invention of "Improvements in thrashing machines, and in raising and stacking straw and other agricultural produce."
As set forth in their respective petitions, all recorded in the said office on the 16th day of September, 1861.

2316. And FREDERIC BARNETT, Inventor, residing at No. 60, St. Mary Axe, in the city of London, has given the like notice in respect of the invention of "An improvement in the light given by street and other lamps, by means of reflectors in white earthenware, china, and all enamel materials, in conjunction with an improved chimney to draw up the exhalations and smoke of all lighting materials."

2319. And GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for the manufacture of horse-shoe and other nails."—A communication to him from abroad by Charles Alexander Louvrier, of Paris, Machinist.

2320. And JOSEPH STATHAM, of Salford, in the county of Lancaster, Blacksmith, and WILLIAM STATHAM, of Openshaw, in the county of Lancaster, Engineer, have given the like notice in respect of the invention of "Certain improvements in machinery or apparatus for mowing and reaping."

2321. And JOSEPH LEE and BENJAMIN DUTTON TAPLIN, of the Patent Crank Works, Lincoln, have given the like notice in respect of the invention of "Improvements in traction engines."
As set forth in their respective petitions, all recorded in the said office on the 17th day of September, 1861.

2323. And GEORGE WHITE, of 7A, Pancras Lane, in the city of London, has given the like notice in respect of the invention of "Improvements in apparatus for filtering or purifying water or other liquids."—A communication to him from abroad by Mr. Jean Antoine Victor Burg, Doctor of Medecine, of Paris.

2327. And HENRY WICKENS, of No. 4, Token-house Yard Bank, in the city of London, Solicitor, has given the like notice in respect of the invention of "Improvements in reaping and mowing machines."—A communication to him from abroad by Nicholas Coones, of the city of London, in the county of Middlesex, in the province of Canada, America, Engineer.

2328. And EDWARD PARTINGTON, of Heap Bridge, in the county of Lancaster, Manager, has given the like notice in respect of the invention of "Certain improvements in machinery or apparatus employed in the manufacture of paper."
As set forth in their respective petitions, all recorded in the said office on the 18th day of September, 1861.

2334. And JAMES CLOUGH, Foreman, in the employ of Messieurs Dobson and Barlow, of Bolton-le-Moors, in the county of Lancaster, Machine Makers, has given the like notice in respect of the invention of "Certain improvements in machinery for preparing cotton and other fibrous substances."

2345. And SAMUEL HAWKSWORTH, of Doncaster, has given the like notice in respect of the invention of "Improvements in the manufacture of floor-cloth and in ornamenting other surfaces."
As set forth in their respective petitions, both recorded in the said office on the 19th day of September, 1861.

2351. And JOHN OLIVER, of Colchester, in the county of Essex, Manufacturing Chemist, JOHN GRANTHAM, of No. 31, Nicholas Lane, in the city of London, Engineer, WILLIAM SINNOCK, of Sylvan Cottage, Woodford, in the county of Essex, Ropery Engineer, and MONTAGUE RICHARD LEVERSON, of No. 12, Saint Helen's Place, in the city of London, Solicitor and Patent Agent, have given the like notice in respect of the invention of "Improvements in the mode of obtaining certain chemical substances, and in the treatment of vegetable fibre, and in obtaining manurial and other products therefrom."
As set forth in their petition, recorded in the said office on the 20th day of September, 1861.

2376. And JAMES PRICE, of Dundalk, Ireland, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the permanent way of railways."

2377. And JOSEPH JACOB, of Brünn, in the empire of Austria, but at present residing in Golden Square (W.), London, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in the mode of, and apparatus for, obtaining and treating hydrogen gas, and the application thereof to various purposes, parts of which improvements are applicable to the manufacture of iron and steel."—A communication to him from abroad by Carl Preisenhammer and Carl Weniger, both of Zöptau, in the empire of Austria.

As set forth in their respective petitions, both recorded in the said office on the 23rd day of September, 1861.

2381. And GEORGE JOSEPH GLADSTONE, of Blackwall, Shipwrights' Surveyor, has given the like notice in respect of the invention of "Improvements in apparatus for disengaging boats."

As set forth in his petition, recorded in the said office on the 24th day of September, 1861.

2389. And JOSEPH MUSGRAVE, of the firm of Messrs. John Musgrave and Sons, of the Globe Iron Works, Bolton-le-Moors, in the county of Lancaster, has given the like notice in respect of the invention of "Certain improvements in the application of steam power."

As set forth in his petition, recorded in the said office on the 25th day of September, 1861.

2412. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in the manufacture of peat."—A communication to him from abroad by Auguste Marcellin Manrique Comte de Lara et du Ren, Engineer, of 29, Boulevart St. Martin, Paris.

As set forth in his petition, recorded in the said office on the 26th day of September, 1861.

2422. And JOHN ADAMS KNIGHT, of No. 4, Symond's Inn, Chancery Lane, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improvements in steam pumping engines."—A communication to him from abroad by Wellington Lee, of 197, East 19th Street, New York, United States of America.

As set forth in his petition, recorded in the said office on the 28th day of September, 1861.

2470. And THOMAS EVANS, of Westmoreland Street, Westminster, in the county of Middlesex, Mechanic, has given the like notice in respect of the invention of "Improvements in the manufacture of boots, shoes, and other coverings for the feet, and in the machinery, apparatus, and means connected with such manufacture."

As set forth in his petition, recorded in the said office on the 3rd day of October, 1861.

2475. And PETER KNOWLES, Foreman in the employ of Messieurs Dobson and Barlow, of Bolton-le-Moors, in the county of Lancaster, Machine Makers, has given the like notice in respect of the invention of "Improvements in machinery for opening and cleaning cotton and other fibrous materials."

As set forth in his petition, recorded in the said office on the 4th day of October, 1861.

2597. And CHARLES DENTON ABEL, of 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for the simultaneous manufacture of white lead and vinegar."—A communication to him from abroad by Robert Rowland, residing in the city of New York, in the United States of America.

As set forth in his petition, recorded in the said office on the 18th day of October, 1861.

2628. And FERRAR FENTON, of Fishguard, in the county of Pembroke, has given the like notice in respect of the invention of "Improvements in obtaining and treating fibrous substances."

As set forth in his petition, recorded in the said office on the 21st day of October, 1861.

2648. And HENRY KEACH, Artist in Design, 16, Bedford Terrace, Andover Road, Holloway, in the county of Middlesex, has given the like notice in respect of the invention of "An improvement in the manufacture of segars."

As set forth in his petition, recorded in the said office on the 23rd day of October, 1861.

2683. And MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "Improved apparatus for ascertaining the presence and degree or cessation of vitality in the human body and in animals of the higher class, applicable to the semeiosis of health, disease, and death."—A communication from Léon Victor Collongues (M.D.), a person resident at No. 72, Grande Rue, Passy-lez-Paris, in the empire of France.

As set forth in his petition, recorded in the said office on the 26th day of October, 1861.

2802. And THOMAS CHURCHMAN DARBY, Farmer, Little Waltham, in the county of Essex, has given the like notice in respect of the invention of "Improvements in the construction of horse hoes."

2803. And BENJAMIN DOBSON, of Bolton-le-Moors, in the county of Lancaster, Machine Maker, and JAMES CLOUGH, of the same place, Foreman, have given the like notice in respect of the invention of "Certain improvements in machinery for combing, preparing, and spinning cotton and other fibrous substances."

As set forth in their respective petitions, both recorded in the said office on the 8th day of November, 1861.

2970. And WILLIAM SELLERS, of Keighley, in the county of York, Machine Maker, has given the like notice in respect of the invention of "Improvements in means or apparatus for sewing."

As set forth in his petition, recorded in the said office on the 26th day of November, 1861.

2990. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in the clasps or

fastenings of purses, bags, portfolios, tobacco-pouches, and other like articles." —A communication to him from abroad by Mrs. Joseph Schoen Feld, of 29, Boulevart St. Martin, Paris, in the empire of France, Leather Case Manufacturer.

As set forth in his petition, recorded in the said office on the 27th day of November, 1861.

3067. And Thomas Lawes, of 65, City Road, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in the manufacture of quilts and coverlets."

As set forth in his petition, recorded in the said office on the 7th day of December, 1861.

3122. And Richard Ashworth and George Shepherd, Manufacturers, and John Cormack, Mechanic, and John Dearden, Overlooker, all of Stacksteads, in the county of Lancaster, have given the like notice in respect of the invention of "Improvements in looms for weaving."

3130. And Thomas Walker, of Birmingham, in the county of Warwick, Engineer, has given the like notice in respect of the invention of "Improvements in means or apparatus for indicating the speed of vessels, and for taking soundings."

As set forth in their respective petitions, both recorded in the said office on the 13th day of December, 1861.

3160. And John William Chalfont, of No. 7, Denmark Grove, in the parish of Islington, in the county of Middlesex, Watch Maker, and David Keys, of No. 15, Craven Street, Strand, in the county of Middlesex, Watch Maker, have given the like notice in respect of the invention of "Improvements in the method of, and apparatus for, winding up fusee watches and pocket chronometers, and setting the hands without key."

As set forth in their petition, recorded in the said office on the 17th day of December, 1861.

3208. And William Mattieu Williams, of Handsworth, in the county of Stafford, Teacher, has given the like notice in respect of the invention of "An improvement or improvements in treating coal and other bituminous minerals and peat, in order to obtain solid and liquid hydrocarbons therefrom, and in apparatus to be used for that purpose."

3209. And William Loader Allchin and William Allchin, of the Globe Works, Northampton, in the county of Northampton, Engineers, have given the like notice in respect of the invention of "Improvements in apparatus applicable to the superheating of steam."

As set forth in their respective petitions, both recorded in the said office on the 21st day of December, 1861.

3252. And John Peter Dormay, of Wandsworth, in the county of Surrey, James Shirley Aikenhead, of the same place, Boat Builder, and Thomas Johnson, of the same place, Boat Builder, have given the like notice in respect of the invention of "Improvements in the construction of boats for sailing or rowing."

3256. And George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, has given the like notice in respect of the invention of "Improvements in apparatus for raising or forcing water or other fluids."—A communication to him from abroad by Mr. Edward Bruce Boughton Barker, of H.B.M.'s Consul, at Samsoun and Sinope, Black Sea.

As set forth in their respective petitions, both recorded in the said office on the 30th day of December, 1861.

3260. And William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of certain descriptions of woven looped and bobbin net fabrics by the application of certain fibrous materials thereto."

3262. And William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of umbrellas and parasols."

As set forth in his respective petitions, both recorded in the said office on the 31st day of December, 1861.

1. And John Martin Rowan, of Glasgow, in the county of Lanark, North Britain, Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of railway wheels, and in apparatus to be used therein."

As set forth in his petition, recorded in the said office on the 1st day of January, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

21st January, 1861.

1844. Thomas Gray, of No. 19, Hill's Cottages, Union Road, Wandsworth, in the county of Surrey, Manufacturer of Paper Making Materials, for an invention of "An improved method of preparing flax from old materials for spinning and other purposes."—Dated 23rd July, 1861.

1845. Nicolas Etienne Dumesnil, of 12, Rue aux Loups, Sotteville-les-Rouen, in the empire of France, for an invention of "Improvements in materials for lubricating parts of machinery and for other lubricating purposes."—Dated 23rd July, 1861.

1851. Thomas Hughes, of Birmingham, in the county of Warwick, Manager of the Imperial Iron Tube Company, for an invention of "An improved steam generator."—Dated 24th July, 1861.

1859. Richard Threlfall, of Bolton, in the county of Lancaster, Machine Maker and Founder, for an invention of "Improvements in machinery or apparatus for spinning cotton or other fibrous material."—Dated 24th July, 1861.

1863. William Longmaid, of Inver Galway, Ireland, for an invention of "Improvements in the manufacture of iron."—Dated 24th July, 1861.

1865. Benjamin Brown, of Bury, in the county of Lancaster, Mechanic, and Richard Hacking, of the same place, Machine Maker, for an invention of "Certain improvements in machinery or apparatus employed in spinning cotton, wool, silk, and other fibrous substances."—Dated 25th July, 1861.

1869. Edward Haeffely, of Kearsley, in the county of Lancaster, Analytical Chemist, for an invention of "Improvements in extracting copper from its ores."—Dated 25th July, 1861.

1880. Robert Elmy Garrood, of High Street, Chelmsford, in the county of Essex, Carver and Gilder, for an invention of "Improvements in mitre boxes and shooting boards."—Dated 27th July, 1861.

1881. James Beeten Herbert, of 8, Newman Street, in the county of Middlesex, for an invention of "Improvements in fire guards."—Dated 27th July, 1861.

1882. William Horatio Harfield, of 2, Royal Exchange Buildings, in the city of London, for an invention of "Improvements in constructing and propelling ships and vessels."—Dated 27th July, 1861.

1899. Thomas Stokes Cressey, of Burton-on-Trent, for an invention of "Improvements in machinery used in the manufacture of casks."—Dated 30th July, 1861.

1907. John Rylands, Thomas Glazebrook Rylands, and Peter Rylands, of Warrington, Wire Manufacturers and Galvanizers, for an invention of "Improvements in joining wire for telegraphic conductors and other purposes."—Dated 31st July, 1861.

1916. Matthew Pratt, of Fenton Potteries, in the county of Stafford, Earthenware Manufacturer, for an invention of "An improved mode of manufacturing candle moulds."—Dated 1st August, 1861.

1956. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in bleaching and clarifying saccharine matters, and in apparatus for the same."—A communication to him from abroad by Messieurs Edouard Théophile de Gemini and Edmond Oswald de Gemini, both of 29, Boulevart St. Martin, Paris.—Dated 6th August, 1861.

1964. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improvements in certain descriptions of breech-loading fire-arms."—A communication from Alem Rousseau, a person resident at No. 48, Rue Croix des Petits Champs, Paris.—Dated 7th August, 1861.

2116. William Clissold, of Dudbridge Works, near Stroud, in the county of Gloucester, Patent Machine Manufacturer, for an invention of "Improved apparatus for oiling wool."—Dated 24th August, 1861.

2243. Robert Owen White, of Blackheath Park, in the county of Surrey, for an invention of "Improvements in the manufacture of bricks."—Dated 7th September, 1861.

2314. Bernhard Samuelson, of Banbury, in the county of Oxford, Engineer, for an invention of "Improvements in harvesting machines."—Dated 17th September, 1861.

2535. James Downs, of Kingston-upon-Hull, in the county of York, Engineer, for an invention of "Improvements in pumps and stops used for working hydraulic presses."—Dated 10th October, 1861.

2840. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in self-feeding inkstands."—A communication to him from abroad by Charles Close, of New York, in the United States of America.—Dated 12th November, 1861.

3046. Charles Samuel Henry Hartog, of Norfolk Street, Strand, in the county of Middlesex, Merchant, for an invention of "Improvements in the preparation and treatment of vegetable fibres the better to adapt them for combining, working up, and dyeing with different fibres, such as silk, wool, cotton, and others, and in apparatus used in such treatment or preparation."—Dated 4th December, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 18th January, 1862, inclusive.*)

16th January.

137. James Montgomery, of the city of New York, in the United States of America, for an invention of "Improvements in the construction of the hulls of steam and other vessels, and in the feed water heaters, boilers, water gauges, condensers, engines, and propelling machinery appertaining to the former, a portion of which improvements (with the exception of those on the hull) are applicable to analogous useful purposes."—Dated 17th January, 1859.

143. Roger George Salter, of Alphington, in the county of Devon, Engineer, for an invention of "Improvements in apparatuses for collecting or picking up letters, papers, and other articles requiring to be stamped or printed."—Dated 17th January, 1859.

17th January.

155. Richard Bradley & William Craven, of Westgate Common Foundry, Wakefield, in the county of York, Engineers, for an invention of "Improvements in machinery or apparatus for manufacturing bricks, tiles, and other similar articles."—Dated 18th January, 1859.

156. William Trotter, of South Acomb, in the county of Northumberland, Farmer, for an invention of "Improvements in reaping-machines."—Dated 18th January, 1859.

163. James Whitehead, of Halifax, in the county of York, Wire Manufacturer, for an invention of "Improvements in the means or machinery for the manufacture of 'purled' wire."—Dated 19th January, 1859.

166. William Poupard, of Blackfriars Road, in the county of Surrey, Engineer, for an invention of "An improved wheel-skid or shoe."—Dated 19th January, 1859.

18th January.

160. Pehr Ambjörn Sparre, of Stockholm, but now of 50, Chancery Lane, in the county of Middlesex, for an invention of "Improvements in the manufacture of paper suitable for bank notes, checques, bills and similar articles."—Dated 19th January, 1859.

170. James Croft Reid, of Liverpool, in the county of Lancaster, Master Mariner, and William Milner, of the same place, Manufacturer, for an invention of "Certain improvements in the construction of ships and vessels."—Dated 20th January, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

(*To 17th January*, 1862.)

129. Constant Jouffroy Dumery, of Paris, in the empire of France, and of 32, Essex Street, Strand, London, for an invention of "Improvements in smoke preventing apparatus."— Dated 18th January, 1855.

Erratum in Journal of 14th January, 1862.

2280. For "Laurie" read "Lamie."

COLONIAL PATENTS.—Information as to the Mode of obtaining Protection for Inventions in the Colonies; contained in Communications from the Governors, &c. of the different British Colonies in answer to the Application of Mr. W. J. Curtis for a Patent. Price 1*s*.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s*.

EXTENSION of PATENTS to the COLONIES. Abstract of Replies to the Secretary of State's Circular Despatch of January 2, 1853, on the subject of the Extension of Patents for Inventions to the Colonies. Second Edition, with revised Table, 1861. Price 2*s*.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March ,,
268	,, April to June ,,
291	,, July to September ,,
321	,, October to December ,,
345	A.D. 1854—January to March ,,
371	,, April to June ,,
399	,, July to September ,,
424	,, October to December ,,
451	A.D. 1855—January to March ,,
475	,, April to June ,,
505	,, July to September ,,
527	,, October to December ,,
553	A.D. 1856—January to March ,,
579	,, April to June ,,
605	,, July to September ,,
632	,, October to December ,,
660	A.D. 1857—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1858—January to March ,,
789	,, April to June ,,
815	,, July to September ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632	A.D. 1852—October to December inclusive
660	A.D. 1853—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1854—January to March ,,
789	,, April to June ,,
815	,, July to September ,,

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

FOREIGN PATENTS.



BAVARIA.*

List of Patents delivered during the year 1861.†

(*Communicated by the Bavarian Government.*)

(For preceding List, see No. 736 of this Journal.)

1. Karl Schinz, of Aschaffenburg, for "A peculiar construction of glass-furnaces to be worked by means of gas."—5 years.—Dated 12th January, 1861.
2. Thomas Trestel, of Munich, for "A peculiar construction of turbines."—2 years.—Dated 17th February, 1861.
3. Johann Mannhardt, of Munich, for "A machine for pressing peat."—11 years.—Dated 17th February, 1861.
4. Johann Mayr, of Kempten, for "Construction of forge iron for smiths."—3 years.—Dated 17th February, 1861.
5. Georg Pfanzeder and Maria Engelbreit, of Munich, for "A moveable decimal weigh-bridge."—2 years.—Dated 19th March, 1861.
6. Johann Rieger, of Munich, for "Common guns and breech-loading guns."—2 years.—Dated 21st March, 1861.
7. Johann Schreiner, of Nurnberg, for "Buffer carriages for obviating the danger caused by railway collisions."—1 year.—Dated 1st April, 1861.
8. Lizars, A. Siry, and Comp., for "A compensating gasmeter."—3 years.—Dated 10th April, 1861.
9. Johann Georg Städler, of Nurnberg, for "Glazed gasburners of a peculiar composition."—2 years.—Dated 10th April, 1861.
10. Johann Christoph Wolff, of Kempten, for "Preparing straw and applying the same to elastic apparatus for preventing concussions and shocks."—1 year.—Dated 18th April, 1861.
11. William Lancaster, of Obertürkheim, Wurtemberg, for "Apparatus and movements for power-looms."—5 years.—Dated 27th April, 1861.
12. J. G. Städler, of Nurnberg, for "Manufacture of buttons, mouth-pieces for cigars, insulators, and other plastic objects from a self-glazing composition."—2 years.—Dated 30th April, 1861.
13. J. C. Leuchs, of Nurnberg, for "Preserving meat, roe, and animal and vegetable substances."—2 years.—Dated 8th May, 1861.
14. Dr. Martin Knobloch, of Weihenstephan, and Adolph Beyhl, of Munich, for "A peculiar machine for decomposing wheat in the manufacture of gluten and starch."—2 years.—Dated 15th May, 1861.
15. Georg Albert Reininger, of Stuttgart, for "A machine for rolling cigars and benches for cutting cigars."—4 years.—Dated 26th May, 1861.
16. Heinrich Voelter, of Heidenheim, for "An apparatus for refining fibres or fibrous substances used in the manufacture of paper."—9 years.—Dated 26th May, 1861.
17. Sachsenberg, Brothers, of Roslau-on-the-Elbe, for "A machine with a cutting apparatus for the manufacture of rectangular bricks of equal strength."—3 years.—Dated 26th May, 1861.
18. Ludwig Koch and Kosmas Moser, of Munich, for "Peat presses."—2 years.—Dated 24th May, 1861.
19. Louis Friese, of Stuttgart, for "Moveable saddles."—Dated 30th May, 1861.
20. Lorenz Krammer, of Oberfähring, for "Manufacture of pressed yeast."—1 year.—Dated 17th June, 1861.
21. Georg Schöttle, of Stuttgart, for "A peculiar construction of kneading and bruising machine."—4 years.—Dated 24th June, 1861.
22. Michel Rast, of Munich, for "An apparatus for controlling cab-fares."—2 years.—Dated 24th June, 1861.
23. Johann Stingl, of Passau, for "Culture and treatment of Hungarian leaves of tobacco."—5 years.—Dated 24th June, 1861.
24. Rohrbeck, of Bromberg, for "A chaff-cutting machine."—4 years.—Dated 24th June, 1861.
25. Schäffer and Buddenberg, of Buckau-Magdeburg, for "Valves for regulating and reducing the pressure of liquids and expanded vapours or gas."—4 years.—Dated 30th June, 1861.
26. Johann Battisti, of Innsbruck, for "Strops for setting razors and other edge tools."—1 year.—Dated 18th July, 1861.
27. August Tonar, of Eupen, Prussia, for "Machines for drying and cleaning malt."—4 years.—Dated 25th July, 1861.
28. Theodor Rüdiger and William Rhodes, of Chemnitz, for "A so-called 'Universal spinning machine and improved self-actor.'"—5 years.—Dated 16th August, 1861.
29. Michael Masson, of Munich, for "Applying peat to bricks."—5 years.—Dated 31st August, 1861.
30. Johann Gottfried Hofmann, of Breslau, for "An apparatus for extracting oil from seeds by means of sulphuret of carbon."—2 years.—Dated 26th September, 1861.
31. T. M. Reichenberger, of Grötschenreuth, for "Construction and manufacture of coupling rods and nails for railway-carriages."—2 years.—Dated 5th October, 1861.

* For the Patent Law of Bavaria, see No. 262 of this Journal.

† The Specifications of expired Patents may be consulted in the Public Free Library of the Great Seal Patent Office, where translations may also be had.

32. Gustav Walter, of Paris, for "Improvements in the manufacture of silk plush."—2 years.—Dated 10th October, 1861.

33. Emil Langen, of Siegburg, for "Apparatus for collecting the gases of furnaces."—2 years.—Dated 10th October, 1861.

34. Schaeffer and Walker, of Berlin, for "Manufacture of lighting gas."—2 years.—Dated 10th October, 1861.

35. Grossberger and Kurz, of Nurnberg, for "Manufacture of a so-called 'Stone ferment.'"—5 years.—Dated 4th November, 1861.

36. Eduard Karcher and Co., of Saarbruck, for "A new process for bleaching vegetable fibres, yarns, and tissues."—5 years.—Dated 4th November, 1861.

37. Michael Winkler, of Vienna, for "Safety-locks with so-called 'Mignon locks.'"—1 year.—Dated 7th November, 1861.

38. Rudolph Gottgetreu, of Munich, for "A peculiar process called 'Crystal typography,' for the manufacture of shares or documents that cannot be imitated."—1 year.—Dated 8th November, 1861.

39. Philipp Amos, of Fürth, for "Manufacture of bronze colours."—2 years.—Dated 12th November, 1861.

40. Dr. Samuel Hary Scipton, of London, for "Improvements in splints for fractures."—2 years.—Dated 12th November, 1861.

41. Antonie Lesueur, of Paris, for "Improvements in slabs, bricks, and tiles."—2 years.—Dated 12th November, 1861.

42. Herrmann Meerboth, of Nurnberg, for "Manufacture of so-called 'Parchment paper.'"—2 years.—Dated 12th November, 1861.

43. L. Schwarzkopf, of Berlin, for "A caloric engine."—4 years.—Dated 20th November, 1861.

44. Ernst Gessner, of Aue, Saxony, for "Improvements in cards."—4 years.—Dated 1st December, 1861.

45. George Rasshofer, of Munich, for "Manufacture of court plaster."—2 years.—Dated 9th December, 1861.

46. Andreas Bolzano, of Munich, for "A peculiar machine for preparing and drying malt."—3 years.—Dated 15th December, 1861.

47. Eduard Thode, of Dresden, for "An apparatus for pressing liquids from thick substances."—3 years.—Dated 15th December, 1861.

48. Caroline Hüther, of Munich, for "Manufacture of washing-flour for cleaning linen."—1 year.—Dated 18th December, 1861.

49. Friederich Möttler, of Augsburg, for "Manufacture of green colour free from poison."—5 years.—Dated 22nd December, 1861.

50. David Sandel, of Munich, for "Machines for the manufacture of pressed peat."—10 years.—Dated 29th December, 1861.

51. Ernst Zorn, Johann Nep. Mayer, and Konrad Lawer, of Ratisbon, for "Improvements in the construction of steam-boilers."—5 years.—Dated 29th December, 1861.



FRANCE.

Current List of Patents of Invention and Certificates of Addition.

1861.

(Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.)

Note.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

50,424. Longbottom, domiciled with Redier, 16, Cours des Petites-Ecuries, Paris, for "Anapparatus for the generation and application of heat."—Dated 12th July, 1861.

50,425. Menaut, of 19, Rue des Deux-Ponts, Paris, for "Currycombs without hammers for the cavalry."—Dated 17th July, 1861.

50,426. Monodier and Dreyfus, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in apparatus for the manufacture of alcohol."—Dated 13th July, 1861.

50,427. Negrino and Gaillard, of 9, Cours de Brosses, Lyons, for "Improvements in the construction of harmoniums or expressive organs."—Dated 20th July, 1861.

50,428. Neuvy-Brethon, of 13, Rue au Gazomètre, Tours, for "A machine for the manufacture of drain tiles and hollow bricks."—Dated 17th July, 1861.

50,429. Petit, represented by Le Blanc, of 2, Rue St. Appoline, Paris, for "Improvements in clock-making."—Dated 13th July, 1861.—(English Patent, 8th July, 1861.)

50,430. Prouvost, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in tubular generators with the optional addition of a reheating or distilling apparatus."—Dated 13th July, 1861.

50,431, Sloan, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in frames for the manufacture of lace-work."—Dated 13th July, 1861.

50,432. Tharlet, of 32, Rue Sedaine, Paris, for "A circular cutting apparatus."—Dated 13th July, 1861.

50,433. Vercasson, of St. Chamond, for "An apparatus called 'Cop,' used in the manufacture of lace or braid."—Dated 18th July, 1861.

* For the French Patent Law see No. 228 of this Journal.

50,434. Beckhaus-Davons, of 10, Boulevart Montmartre, Paris, for "A collection of photographs with special designs, called 'Pantheon of the imperial order of the Legion d'Honneur.'"—Dated 17th July, 1861.

50,435. Bernard, of 114, Rue de Ménilmontant, Paris, for "A system of stringed instruments for bows."—Dated 16th July, 1861.

50,436. Boucherat, of 37, Rue de la Bûcherie, Paris, for "Improvements in the manufacture of foot-coverings."—Dated 17th July, 1861.

50,437. Brun, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A brush for washing and dry-rubbing floors, &c."—Dated 15th June, 1861.

50,438. Charrié, of Rue Naujac, Bordeaux, for "An enchanted top worked without any string."—Dated 3rd July, 1861.

50,439. Charvet, represented by Bos-Darnis, of 36, Rue de l'Echiquier, Paris, for "A kind of thread and its various applications."—Dated 17th July, 1861.

50,440. Chauvet, of 29, Rue des Marchands, Avignon, for "An apparatus for the manufacture of consecrated wafers."—Dated 22nd July, 1861.

50,441. Corbin, of 3. Rue Trouchet, Paris, for "A motive engine."—Dated 16th July, 1861.

50,442. Davoit and Company, of Châlon-sur-Saône, for "An iron for obtaining furrows in the necks of bottles."—Dated 23rd July, 1861.

50,443. Dayre-Niéto, of 8, Rue Cacault, Nantes, for "Suspension by means of moveable journals, and with alternate blades for the arms of balances."—Dated 26th July, 1861.

50,444. Delvart, of Denain, for "A suction and lift-pump for draining mines."—Dated 24th July, 1861.

50,445. Desoye, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Studs for ruffles, collars, &c."—Dated 15th July, 1861.

50,446. Dutillot and Guigo, of 14, Boulevart Dugommier, Marseille, for "A so-called 'Magnetic thermo-electric motor,' being a substitute for steam."—Dated 11th June, 1861.

50,447. Eglem and Bonnard, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in spinning and weaving machines."—Dated 15th July, 1861.

50,448. Flamard and Touzé, of Tourville-la-Rivière, for "A kneading trough with separate screws and a flour-sieve."—Dated 22nd July, 1861.

50,449. Gautier, Sons, and Company, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A kiln for carbonizing artificial coal."—Dated 15th July, 1861.

50,450. Gerard, represented by Barrault, of 33, Boulevart Saint Martin, Paris, for "Tiles."—Dated 16th July, 1861.

50,451. Goutière, of Corbehem, for "A raising apparatus with endless cloth for the manufacture of animal charcoal."—Dated 22nd July, 1861.

50,452. Guaymard, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in the manufacture of shirts, fronts of shirts, collars, and ruffles."—Dated 16th July, 1861.

50,453. Hervieu, of Vaubadon, for "Flanged tiles."—Dated 19th July, 1861.

50,454. Lanoe-Bidard, of 39, Rue St. Louis, Rennes, for "A mode of stoppering."—Dated 12th June, 1861.

50,455. Le Page, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "Increasing light by means of projectors."—Dated 17th July, 1861.

50,456. De Louvrié, of 23, Boulevart du Temple, Paris, for "A steam engine, called 'Gasogenous cylinder.'"—Dated 16th July, 1861.

50,457. Magron and Berthellier, of 8, Rue Saint Nicolas du Chardonnet, and 5, Rue Montorgueil, Paris, for "Glass casks for beer."—Dated 16th July, 1861.

50,458. Neveu-Derotrie and Charrier, of l'Ile Dieu, for "Improvements in rocking arm-chairs for the sea, as patented 21st January, 1860."—Dated 19th July, 1861.

50,459. Payras, of 6, Rue Edouard-Adam, Montpellier, for "A mode of preserving hides."—Dated 19th July, 1861.

50,460. Poulet, of 135, Boulevart de Magenta, Paris, for "Improvements in the construction of turn-tables."—Dated 16th July, 1861.

50,461. Rainal and Sons, of 23, Rue Saint Denis, Paris, for "A truss."—Dated 16th July, 1861.

50,462. Rousset, represented by Amouroux, of 333, Rue Saint Martin, Paris, for "A kind of head dresses made by crotchet and the needle."—Dated 16th July, 1861.

50,463. Thiéry, of 30, Rue Picpus, Paris, for "A machine for pressing stained paper."—Dated 17th July, 1861.

50,464. Tissier, of Amfreville-la-Mivoie, for "A method of refining metals by means of the steam of sodium."—Dated 17th July, 1861.

50,465. Tournier, of Arcachon, for "A kind of sledge carriage for travelling on sand and in the desert."—Dated 26th July, 1861.

50,466. Touzé, of Tourville-la-Riviére, for "An anti-friction journal."—Dated 22nd July, 1861.

40,467. Alexandre, Brothers, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A continuous mod e of drawing and twisting applied to carded wool."—Dated 18th July, 1861.

50,468. Bernier and Arbey, represented by Mathieu, of 45, Rue St. Sébastieu, Paris, for "Improvements in the construction and arrangement of endless saws."—Dated 18th July, 1861.

50,469. Berthier, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "An optical apparatus for double microscopic photographs."—Dated 18th July, 1861.

50,470. Blachier and Talibon, of 47, Chaussée de la Madeleine, and 4, Rue de la Boucherie, Nantes, for "A chimney slide without counterweight and screw chimney top."—Dated 27th July, 1861.

50,471. Bouquiè, of 43, Rue Saint Georges, Paris, for "Chain pulleys, being a substitute for cylinders of windlasses and notched pulleys."—Dated 18th July, 1861.

50,472. Cheneveau, of 5, Passage St. Dominique, Paris, for "A system of windows."—Dated 17th July, 1861.

50,473. Breedon and Schneider, represented by Courrouve, of 28, Rue Feydeau, Paris, for "A self-acting socket for taps, cocks of fire-engines, and similar objects."—Dated 19th July, 1861.—(English Patent, 18th March, 1861.)

50,474. Corbière, of 12, Rue Triperie-Neuve, Montpellier, for "A force pump for all kinds of liquids."—Dated 28th July, 1861.

50,475. Coulon, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A propeller with a direct action."—Dated 18th July, 1861.

50,476. Desjardins and Mechee, of 36, Rue Mont Parnasse, and 129, Rue de la Procession, Paris, for "Using inoxidable substances in the manufacture of cameræ obscuræ for microscopic pictures."—Dated 19th July, 1861.

50,477. Desliens, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A photograph holder in albums."—Dated 17th July, 1861.

50,478. Dumas and Taisseire, of 272, Rue Saint Honore, Paris, for "Gas burners."—Dated 18th July, 1861.

50,479. Dumont, 1, Quai de Grenelle, Paris, for "Improvements in jacks."—Dated 18th July, 1861.

50,480. Fermery and Seytre, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "French centimeters."—Dated 18th July, 1861.

50,481. Flaunet, represented by Brade, of 29, Rue Sainte Anne, Paris, for "Manufacture of stained paper and oil cloth imitating wood, incrustations, marble, &c."—Dated 15th July, 1861.

50,482. Fontange, jun., represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of coatings for doors of carriages."—Dated 19th July, 1861.

50,483. Gargan and Compy., of 7, Rue de Valenciennes, Paris, for "A lever for moving railway carriages, &c., at stations."—Dated 18th July, 1861.

50,484. Guibillon, of 17, Rue Mauconseil, Paris, for "Applying ornamental painting."—Dated 18th July, 1861.

50,485. Heurtier and Linière, of 33, Rue Pigalle, Paris, for "A gas moderator.' —Dated 19th July, 1861.

50,486. Joy, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in lithographic presses."—Dated 17th July, 1861.—(English Patent, 17th January, 1860.)

50,487. Lefévre, of 31, Rue St. Lazarc, Paris, for "An optical instrument called 'Helioscope.'"—Dated 18th July, 1861.

50,488. Longmaid, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of iron and steel."—Dated 18th July, 1861.—(English Patent, 24th January, 1861.)

50,489. Maldan, of 207, Rue Saint Martin, Paris, for "A cylindrical apparatus for polishing,"—Dated 19th July, 1861.

50,490. Mauvage, of Héry, for "A machine for cutting clay for brickworks and potteries."—Dated 26th July, 1861.

50,491. Mushet, represented by Barrault, of 33, Boulevart Saint Martin, Paris, for "Improvements in the manufacture of cast steel."—Dated 19th July, 1861.—(English Patent, 21st January, 1861.)

50,492. Perrott, represented by Brandon, of 13, Rue de Gaillon, Paris, for "Grease or paste for lubricating axles of carriages and rubbing parts in machinery in general."—Dated 19th July, 1861.—(English Patent, 21st January, 1861.)

50,493. Pichard, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A lift pump with a continuous jet." — Dated 17th July, 1861.

50,494. Poisat, of 32, Rue Bleue, Paris, for "Converting oleine into elaïdic acid in fat substances and oils."—Dated 18th July, 1861.

50,495. Rougier, of 51, Cours Belzunce, Paris, for "A filter for clarifying water and other liquids."—Dated 22nd July, 1861.

50,496. Sidebottom, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in ordnance and fire-arms."—Dated 17th July, 1861.—(English Patent, 14th January, 1861.)

50,497. De Tocqueville, of 127, Rue du Faubourg St. Honoré, Paris, for "A process for fattening oysters."—Dated 19th July, 1861.

50,498. Villiére, of Vire, for "An apparatus for measuring liquids."—Dated 26th July, 1861.

50,499. Zani, Father and Sons, of 131B, Grande Rue, Besançon, for "A cast-iron fireplace with a ventilator for hot air stoves."—Dated 25th July, 1861.

50,500. Badie, of 14, Rue Barrière-de-Couéran, Nantes, for "An instrument for projecting light by means of water."—Dated 30th July, 1861.

50,501. Balmont and Company, of 20, Rue de l'Arbre-Sec, Lyon, for "Imitating furs by means of Jacquart looms."—Dated 26th July, 1861.

50,502. Beuchat and Blanco, of 57, Rue Rambuteau, Paris, for "A tool for embossing metallic eyelets."—Dated 22nd July, 1861.

50,503. Chavin, of Commune de Chassel, Marigna, for "A machine for cutting wood longitudinally for the manufacture of packing cases and boxes."—Dated 27th July, 1861.

50,504. Dantec, of 7, Rue des Ursulines, Valenciennes, for "An insulating throstle for stacks."—Dated 31st July, 1861.

50,505. Defrey, Houssier, and Leprêtre, of 98, Rue du Mans, Alençon, for "Various processes of tanning vegetable textile substances."—Dated 26th July, 1861.

50,506. Dégory, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in painting and ornamenting zinc objects,"—Dated 19th July, 1861.

50,507. Derognat and Neyret, of 21, Port St. Clair, Lyon, for "Obtaining a longitudinal grain in tissues, especially for producing all kinds of moire in a transversal direction."—Dated 25th July, 1861.

50,508. De Douhet, of 40, Rue St. Dominique, Paris, for "Processes applicable to optics and lighting."—Dated 22nd July, 1861.

50,509. Fauchon, of 1, Rue Herbiére, Rouen, for "Sizing cotton for tissues in general."—Dated 27th July, 1861.

50,510. Flicoteaux, of 21, Place Bellecour, Lyon, for "A tap with a safety clack valve."—Dated 24th July, 1861.

50,511. Gaillepau, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A liquid for dry rubbing floors, marble, mahogany, &c., being a substitute for wax and brushes."—Dated 19th July, 1861.

50,512. Grare-Carrois, of Saint Quentin, for "A cast iron frying pan, with a guide for cinders, of one single piece."—Dated 29th July, 1861.

50,513. Gras, of Rue St. Roche, Quartier St. Pierre, Marseille, for "Vegetable oily coal."—Dated 27th July, 1861.

50,514. Husson, of 4, Quai Jean-Bart, Nantes, for "Means of silvering mirrors one placed above the other."—Dated 27th July, 1861.

50 515. Hutant, sen., of 122, Rue de la Grosse Horloge, for "A trap for flies."—Dated 27th July, 1861.

50,516. Jousse, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "A safety gun."—Dated 20th July, 1861.

50,517. Lambert, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of nails."—Dated 19th July, 1861.

50,518. Lebrun, of 12, Rue Croix des Petits Champs, Paris, for "Manufacture of copings of walls of Egyptian stone."—Dated 22nd July, 1861.

50,519. Lecomte and Coy, of 12, Rue St. Gilles, Paris, for "Improvements in pistons of brass instruments."—Dated 22nd July, 1861.

50,520. Miquel, of St. Chinian, for "A throstle with holed spindles."—Dated 24th July, 1861.

50,521. Miroy, Brothers, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A system of reflectors."—Dated 20th July, 1861.

50,522. Morel-La-Vallee, of 40, Boulevart de Sébastopol, Paris, for "An atmospheric motor."—Dated 22nd July, 1861.

50,523. Raynaud, of the Epinasse Mines, Ineuil, for "Using piston troughs for washing granular iron ore."—Dated 27th July, 1861.

50,524. Remy, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "Discovering the brier wood of Havannah ceder trees, being a substitute for mahogany and rose wood in cabinet work."—Dated 20th July, 1861.

50,525 Renault, of Balan, for "An apparatus for cooling beer."—Dated 23rd July, 1861.

50,526. Roquin-Evrard, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A hand mill for crushing and pounding all kinds of substances and grain."—Dated 20th July, 1861.

50,527. Salomé, of Salernes, for "A machine for cutting hexagonal bricks for soap boilers."—Dated 27th July, 1861.

50,528. Siess and Coindreau, represented by Ricordeau, of 53, Boulevart de Strasbourg, Paris, for "A substitute for wool or cotton flock for ornamenting stuffs, paper, &c."—Dated 20th July, 1861.

50,529. Tellier, of 8, Rue Petite des Berceaux, Epernay, for "A match case with an instantaneous friction."—Dated 26th July, 1861.

50,530. Vautrin, of 233, Rue du Faubourg St. Martin, Paris, for "A planing machine."—Dated 19th July, 1861.

50,531. Aldborough, represented by Ricordeau, of 23 Boulevart de Strasbourg, Paris, for "Improvements in projectiles."—Dated 25th July, 1861.

50,532. Alexis, of 220, Rue de Rivoli, Paris, for "Railway breaks."—Dated 25th July, 1861.

50,533. Bénard, of 83, Rue du Temple, Paris, for "Manufacture of jewellery with spangles."—Dated 24th July, 1861.

50,534. Brevet, of 51, Rue des Cendriers, Paris, for "A fencing swing."—Dated 24th July, 1861.

50,535. Broudet, Rue d'Estrées, Rennes, for "An hygienic arm-chair."—Dated 24th July, 1861.

50,536. Cabirol, of 17, Rue du Faubourg Montmartre, Paris, for "A submarine lamp."—Dated 26th July, 1861.

50,537, Coindreau, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A kind of embroideries."—Dated 24th July, 1861.

50,538. Cuisinier, represented by Mehay, of 6, Rue des Meuniers, Paris, for "Apparatuses and processes for the manufacture of beetroot sugar."—Dated 26th July, 1861.

50,539. Dancer, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Improvements in achromatic prisms."—Dated 29th June, 1861.—(English Patent, 20th June, 1861.)

50,540. Delahaye, of 18, Rue de Bercy, Paris, for "A kind of light and glazed maccaroni."—Dated 25th July, 1861.

50,541. Dutot and Compy., of 51, Cours de Vincennes, Paris, for "A musical instrument called 'Harmonium bells.'"—Dated 23rd July, 1861.

50,542. Ellis, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in rag-cutting machines."—Dated 22nd July, 1861.—(English Patent, 22nd January, 1860.)

50,543. Evrard, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Treatment of minerals."—Dated 23rd July, 1861.

50,544. Gaudibert, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A cigar cutter."—Dated 23rd July, 1861.

50,545. Gouzian, of 25, Rue des Jeûneurs, Paris, for "Cravat collars and twin buttons with a double hook."—Dated 22nd July, 1861.

50,546. Huguenin, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A so-called 'Personal snuff-box.'"—Dated 24th July, 1861.

50,547. KLEIN, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A lock or clasp applicable to travelling bags and other leather articles."—Dated 25th July, 1861.

50,548. MAINGOT, of 7 and 11, Passage du Saumon, Galerie Mandar, Paris, for "A double tissue that may be divided into two by a splitting machine."—Dased 23rd July, 1861.

50,549. MAUGER, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Manufacture of forks and spoons."—Dated 23rd July, 1861.

50,550. NEEDHAM, represented by Bos-Darnis, of 36, Rue de l'Echiquier, Paris, for "Springs applicable to iron or wooden bedsteads and other objects to which springs may be applied."—Dated 23rd July, 1861.

50,551. OGEZ, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "An economical kitchen range."—Dated 24th July, 1861.

50,552. PATY, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A cylindrical templet for looms."—Dated 24th July, 1861.

50,553. PERIMON and DUCLOS, of 88, Boulevart St. Jacques, and 15, Sentier Duclos, Paris, for "An apparatus for sifting, cleaning, &c."—Dated 22nd July, 1861.

50,554. POUGNAIRE, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in fixing and mounting telegraphic wires."—Dated 22nd July, 1861.

50,555. RICHARD, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in power-looms."—Dated 25th July, 1861.

55,556. RIOT, represented by Autart, of 33, Boulevart St. Martin, Paris, for "Manufacture of soap without waste.—Dated 25th July, 1861.

50,557. SAQUET, 68, Boulevart Mont-Parnasse Paris, for "Applying sulphuret of carbon to smothering cocoons."—Dated 24th July, 1861.

50,558. SINIBALDI, of 114, Rue de Rivoli, Paris, for "A poising wheelbarrow."—Dated 24th July, 1861.

50,559. VOISIN, of 19, Rue de la Santé, Paris, for "Impervious canvass."—Dated 24th July, 1861.

50,560. WILLEMS and KUHN, of 12, Rue des Enfants-Rouges, Paris, for "Semi-belts for trousers and waistcoats."—Dated 23rd July, 1861.

50,561. WISSANT, of Cernay, for "Improvements in looms."—Dated 25th July, 1861.

50,562. YVOSE, of 17, Rue Neuve-Popincourt, Paris, for "Diaphanous, or so-called 'Adytodraphanous canvass.'"—Dated 24th July, 1861.

50,563. ADNET, of 1, Rue Moret, Paris, for "Using glass instead of labels on drawers or paper cases."—Dated 27th July, 1861.

50,564. BLANCHARD, Sen., of Rue Pont Trouca, Avignon, for "Printed flagstones."—Dated 31st July, 1861.

50,565. BURILLON, of 6, Rue Grolée, Lyon. for "Anisette syrup."—Dated 31st July, 1861.

50,566. CAGNET, of 41, Rue d'Amsterdam, Paris for "Mounting looms so as to obtain certain effects of broché and warp effects."—Dated 26th July, 1861.

50,567. CETTIER, represented by Zacharie, of 40, Rue de Bourbon, Lyon, for "Printing tissues by means of relief engravings."—Dated 31st July, 1861.

50,568. CHOLLET-CHATET, of 38 and 40, Route St. Gervais, Blois, for "A ventilator for millstones."—Dated 31st July, 1861.



PRUSSIA.*

LIST of PATENTS Delivered and Annulled during the month of December, 1861.

(*Communicated by His Excellency the Minister of Commerce and Public Works.*)

1. PATENTS DELIVERED.

1. J. H. DUDEK, of Myslowitz, for "Construction of a zinc furnace with muffles."—5 years.—Dated 10th December, 1861.

2. CHRISTOPH GÄRTNER, of Borgholzhausen, for "A cork machine."—5 years.—Dated 18th December, 1861.

3. EMIL PERELS, of Berlin, for "A machine for cutting roots and potatoes."—5 years.—Dated 18th December, 1861.

4. J. M. and ALBERT and ADOLPH OTTENHEIMER, of Stuttgart, for an imported invention of "A cloth beam of looms for weaving stays."—5 years.—Dated 24th December, 1861.

5. JUSTUS FUCHS, of Jerzycer, near Posen, for "Manufacture of ferrocyanate of potassa."—5 years.—Dated 24th December, 1861.

6. OSCAR RAVEN, of Hanover, for "A machine for the manufacture of cigars."—5 years.—Dated 24th December, 1861.

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2. PATENTS ANNULLED.

1. EDUARD BEUTHER, of Aix-la-Chapelle, for "A smoke-consuming apparatus for locomotives and moveable engines."—5 years.—Dated 3rd December, 1859; annulled 13th December, 1861.

2. HEINRICH BEINHAUER, of Deutz, for "An overshot water-wheel."—5 years.—Dated 27th November, 1860; annulled 31st December, 1861.

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* For the Prussian Patent Law, see Nos. 313 and 329 of this Journal.



UNITED STATES OF AMERICA.

(Communicated by the Commissioner of Patents.)

LIST of PATENTS, with claims annexed, issued from the United States Patent Office, for the week ending 24th December, 1861, and each bearing that date.

No. 2972. CHARLES ALGER, of Hudson, N.Y., for an "Improvement in breech loading ordnance."

"I claim the spherical breech piece B, having a central opening *g*, and the hollow screw C, applied in combination with each other and with the barrel or body A of the gun, substantially as herein described."

No. 2973. TRAUGOTT BECK, of Newark, N.J., for an "Improved apparatus for bracing the yards of vessels."

"I claim the combination and arrangement of the cone barrels and the tightener with the braces, substantially in the manner and for the purpose herein above specified."

No. 2974. S. A. BLAKE, of New York, N.Y., for an "Improvement in bonnets."

"I claim a bonnet, cap, or other head covering, the body of which is made of two or more thicknesses of muslin or other suitable fabric shaped or formed with a series of raised or embossed stripes in imitation of straw or other braid, by means of suitable dies in the manner herein set forth."

No. 2975. WM. A. BROWN, of Philadelphia, Pa., for an "Improvement in railroad car ventilators."

"I claim a ventilator consisting of the horizontal cylinder B, with its conical frusta b^1, b^1, the interior spiral passage formed by the partition d^1, in the rear end of cylinder B, and the vertical cylinder C, with its adjustable valve F, the said parts being constructed and combined together with each other substantially as described, and applied near each end of the roof (A), so as to operate in combination with the car in motion on a track in the manner set forth and described, and for the purposes specified."

No. 2976. JOHN O. BRYAN, of Owego, N.Y., for an "Improvement in truss pads."

"I claim the construction of the pad, consisting of the two cups, the heliacal spring, and the adjusting screw, all combined and operating in the manner set forth."

No. 2977. ANDREW BUCHANAN, of Jersey City, N.J., for an "Improvement in steam engines."

"I claim, 1st, the arrangement of one or more parallel motions E, in combination with a slide valve A, substantially as and for the purpose set forth. 2nd, the employment of a valve A, with corrugated sides and ends, or with a corrugated back, in combination with the oblong bearing *h* of the pivot *a*, which connects the valve to the parallel motion E, substantially in the manner and for the purpose shown and described. 3rd, the rising and falling frame D, in combination with the valve A, and with an elastic diaphragm F, or its equivalent, constructed and operating substantially as and for the purpose specified. 4th, the combination of the bell-crank lever G, or its equivalent, with the rising and falling frame D, and valve A, substantially in the manner and for the purpose set forth."

No. 2978. M. D. BUDD, of Roscoe, Illinois, for an "Improved machine for cutting bolts."

"I claim forming the jaw B of two parts *c*, *d*, connected by a joint *e*, said parts *c*, *d*, being provided respectively with a hook *k*, and notches *l*, l^1, and all arranged substantially as shown, whereby the jaws A, B, and their cutters C, C, may be distended or spread apart at a greater distance than they otherwise could be, and admit of bolts or rivets which vary materially in size, being cut with one and the same implement."

No. 2979. P. CAUHAUPE, of New Lebanon, N.Y., for an "Improvement in making capsules of copaiva."

"I claim, 1, the arrangement of the shoulder *c* on the mould A, as and for the purpose shown and described. 2, dipping the capsules A, after they have been charged, into some suitable composition as described, for the purpose of closing them, and to produce an even and seamless surface."

No. 2980. M. D. COHEN, of Philadelphia, Pa., for an "Improvement in coverings for the head."

"I claim the combination with fur laps and apron, or either, of an elastic or adjustable belt in front and brace bands on top, arranged in the manner and for the purposes set forth."

No. 2981. JEREMIAH FINK, of Baldwinsville, N.Y., for an "Improvement in cultivators."

"I claim combining with the beam A of a shovel plow, the triangular or double-brace wings E, E, substantially as and for the purposes herein specified."

No. 2982. THADDEUS FOWLER, of Richmond Valley, N.Y., for an "Improved marking brush."

"I claim the hollow arm *c* inclined upwards from the reservoir *a* and the brush *i* at the end thereof, arranged in the manner and for the purposes specified. I also claim arranging the marking brush *i*, spring *o*, and screw *g*, substantially as set forth, whereby the flow of liquid is regulated by the motion of the brush when pressed upon, as set forth."

No. 2983. HORATIO N. FRYATT, of Belleville, N.J., for an "Improvement in refining and crystallizing sugar."

"I claim the process, substantially as specified, for the admission and use in the vacuum pan of alcohol as a divisor of the crystals after the sugar has parted with all or nearly all its water of solution, for the purpose of rendering the mass miscible, and thus permit its easy flow or exit from the pan or evaporating vessel, and also to be capable of netting or arranging its crystals and parting with its fluid portions and coloring matter, whereby I am able to obtain a larger percentage of crystals than by the methods before known."

No. 2984. D. C. GILLILAND, of Brownsville, Ohio, for an "Improvement in cultivators."

"I claim the combination of the draft beam A, hinged beams B and C, removable shanks *a*, *b*, *c*, and detachable shares H, shovels I, and rake J, all constructed, arranged, and employed in the manner and for the purposes herein shown and explained."

No. 2985. RHESA GRIFFIN, of Syracuse, N.Y., for an "Improvement in machines for punching boiler plates."

"I claim a series of rods or bars with catches or hooks arranged between two parallel ways or tracks for a platform to travel on, thereby forming a rack as seen at *d*, Fig. 2, for the latch or pall *i*, as seen at Fig. 4, to set against when let down by slide Y; also the sway bar *n* and form of the catches, and the manner of connecting them to the sway bar *n*, as seen at Figs. 6 and 7; also the bar *m* over the sway bar *n*; also slide A, attached to the platform *a* by set screws *k*, *k*, Fig. 3, with a slot in it, at right angles with the platform, as is also seen at A, A, Fig. 5, with movable dies *t*, *t*, with holes in them for the more expeditiously adjusting of the plates or sheets of iron for the use and purposes above mentioned."

No. 2986. WM. HART, of Mayville, Wis., for an "Improvement in clock escapements."

"I claim, 1st, the escapement composed of a revolving crank pin or eccentric wrist *c*, working within a slot 3 in the pendulum rod, substantially as herein specified. 2nd, arranging the pendulum stud *e* in a plate *f*, fitted to oscillate about the axis of the spindle which carries the crank pin or eccentric wrist *c*, substantially as and for the purpose herein set forth."

No. 2987. GEO. C. HATHAWAY, of Plymouth, Mass., for a "Port folio and writing tablet."

"I claim the combination of a tablet, made substantially as described with a flexible portfolio, for the purpose set forth."

No. 2988. O. T. L. Heine and E. Prussing, of Chicago, Illinois, for an "Improvement in journal boxes."

"We claim the construction of friction or antifriction rollers with holes or passages cut or drilled through them for the purpose of receiving and distributing oil or other lubricating material upon the shaft, axle, pinion, and rollers, in combination with the peculiar mode of wedging, in the manner and for the purposes herein described."

No. 2989. Samuel F. Hodge, of Detroit, Michigan, for an "Improved stamp head for quartz crushers."

"I claim the construction of stamp heads for crushing ores of two metals, one of which is of greater durability than the other, the two metals bearing the relation to each other described, so as to wear away unequally on the working face of the stamp head, and thus ensure the gradual production of an undulating, corrugated, or honey comb crushing force."

No. 2990. Wm. H. Joeckel, of New York, N.Y., for an "Improved seat for schools, &c."

"I claim, 1st, the sliding, tilting, or vertically adjustable seat D, in combination with the vertically adjustable desk F, substantially as described. 2nd, the plate H, provided with the pins *b*, *b*, and projections *c*, *c*, and attached to the upper end tube G, in combination with the guides *d*, *d*, attached to the under side of the seat D, and provided with the notches *e*, *e*, the plate H being fitted between the guides *d*, *d*, and all arranged as shown to admit of the sliding backward and the tilting of the seat, as described."

No. 2991. Wm. B. Johns, of Georgetown, D.C., for an "Improvement in portable fireplaces."

"I claim the construction of the fireplace or stove, so that its sides and top shall fold compactly together for transportation, and when set up for use, shall unfold so as to furnish a space between the outer and inner plates, to be filled with sand, or its equivalent, substantially as and for the purposes herein specified. I also claim the folding mantle plate E, in combination with the fireplace, as described."

No. 2992. Wm. B. Johns, of Georgetown, D.C., for an "Improvement in saddle leggings."

"I claim as a new article of manufacture constructing the leggings, with the adjustable openings C and B, to be attached to the saddle and retained upon the person, in the manner and for the purpose substantially as specified."

No. 2993. Geo. S. Knapp, Dubuque, Iowa, for an "Improvement in harvesters."

"I claim the attaching of the axles of the wheels C, D, of a harvester or other mounted agricultural machine to arms *e*, H, connected to the frame A, or body of the machine, and to a shaft F, substantially as and for the purpose set forth."

No. 2994. L. G. Kniffen, of Worcester, Mass., for an "Improvement in mowing machines."

"I claim, first, the combination with the front inner corner of the main frame and rear inner side of the tongue D of shoe I, coupling or connecting piece H, bent bearing piece O, its pulley *m*, chain *n*, and lever P, substantially as and for the purposes set forth. Second, the combination of piece *q*, and pivoted arm *x*, with shoe I, and lever P, substantially as and for the purposes set forth. Third, the combination of the rigid track piece L, with a finger beam hinged to the front inner corner of a main frame having a hinged tongue and the elevating lever, as and for the purposes set forth. Fourth, suspending the front of the frame from the tongue by means of chain *z*, and arm R, substantially as described. Fifth, the combination of the metal piece E, and collar *c*, with axle B and tongue D, as described."

No. 2995. L. G. Kniffen, of Worcester, Mass., for an "Improvement in cutting apparatus for harvesters."

"I claim, first, the combination of the elevations *e*, of the guards D, bearing pieces *d*, and buttons *h*, with the finger beam C, and the cutter bar E, arranged and operating as and for the purposes set forth. Second, elevating the cutter bar E, and supporting it above the finger beam, in combination with the enlargement of the heel of the bar as seen at K, Fig. 1, as and for the purposes set forth."

No. 2996. C. B. Lashar, of New York, N.Y., for an "Improved car brakes."

"I claim the combination of the bearing of the brake standard with the brake shoes by mechanism, in such manner that the pressure exerted upon the said bearing is propagated to the brake shoes substantially as described. I also claim the combination of the brake mechanism of a car with a thrust plate that projects in advance of the bumper of the car and intervenes between it and the bumper of the adjacent car when the cars are coupled together, substantially as set forth. I also claim the combination of the brake mechanism of a car with two reversible thrust plates, each capable of being placed either in the line of motion of the bumper or out of that time of motion, substantially as set forth."

No. 2997. Thomas J. Mayall, of Roxbury, Mass., for an "Improvement in india rubber mats for floors, &c."

"I claim constructing india rubber or gutta percha mats substantially as herein set forth, *i.e.*, providing the bottom or base with vertical projections or starts of such form and relative arrangement that while affording great facility for the cleaning of the mat they shall act upon the boot or shoe not only as a scraper, but also as a brush and that they shall adapt themselves to and fit into the irregularities or curved portions of the same, whereby every portion of the boot or shoe can be readily cleansed."

No. 2998. Wm. McKain, of Conoy Township, Pa., for an "Improvement in mode of preventing the destruction of bolting cloths in flouring and grist mills."

"I claim the combination of the tin-plate heads A and C by the flange B, with the wire-screen F, the rolling tubular knockers M, N, and arrangement of the winged shaft with the feeding spout I, J, substantially as set forth for the purpose specified."

No. 2999. Solomon Mead, of New Haven, Conn., for an "Improvement in hot air furnaces."

"I claim the combination of the external spiral air passage A, I, C, internal spiral air passages P, H, C^1, spiral fire-flues S, and separate conducting pipes *g* and g^1, all arranged in the manner and for the purposes herein shown and explained."

No. 3000. S. G. Morrison, of Williamsport, Pa., for an "Improved canteen.

"I claim the application to canteens, of a cone or cape of any elastic material, which by inverting may form a funnel on the canteen, or removed therefrom may be used as a cup, substantially as and for the purpose specified."

No. 3001. David Mumma, of Mount Carroll, Illinois, for an "Improvement in treating skins without removing the hair or fur."

"I claim taking the skins in a dry or fresh state, and immediately immersing them in the tanning liquid, so that sufficient of the liquid remains in the skins when coming in contact with the second ingredient to destroy the gum without loosing the fur, substantially as specified."

No. 3002. Peter Naylor, of New York, N.Y., for an "Improvement in casting balls for rifles."

"I claim the employment of a die (3) at the opening through which the metal is poured, in the manner and for the purposes specified."

No. 3003. Alonzo W. Olds, of Green Oak, Michigan, for an "Improvement in rotary harrows."

"I claim, 1st, the vertical and interchangeable adjustment of the wheels I, I, by means of the axles G, bolts H, H, and slots H^1, H^1, as and for the purpose specified. 2nd, I claim placing the flange D, in such position in relation to the sleeve C, that the axle-tree E, may be of one entire piece, as described. 3rd, I claim the wedge F, when placed between the bottom of the flange D, and axle-tree E, as and for the purpose herein set forth."

No. 3004. Simon J. Parmele, of Killingworth, Conn., for an "Improvement in corn shellers."

"I claim, first, in combination with one or more ribbed or toothed shelling cylinders B, B^1, a concave pressure plate C, suspended by an universal joint D, substantially as shown, for the purpose of allowing the plate C, to adjust itself to the ear of corn while being shelled, and ensure the perfect shelling of the same, as set forth. Second, the ribbed cylinders B, B^1, concave pressure plate C, yielding screw F, and door or flap I, all combined and arranged for joint operation, as and for the purpose set forth."

No. 3005. Frederick C. Payne, of New York, N.Y., for an "Improved folding bedstead."

"I claim a folding bedstead formed by the combination of the three frames A, B, C, with a mattress D, when arranged as herein shown and described, to admit of the frames and mattress being folded and at the same time form a box or receptacle for the bed-clothes as set forth."

No. 3006. William Pierpont, of Salem, N.J., for an "Improvement in straw carriers and grain separators for thrashing machines."

"I claim, first, the combination with an elongated perforated apron operated by a crank or cranks, having the peculiar motion described, of a series of feeding and separating teeth, *b*, substantially as and for the purposes set forth. Second, the combination of a tight apron J, with an elongated apron or pierced platform, hung upon and worked by a crank or cranks, having the peculiar motion described, connected with and forming a part of thrashing and separating machine, substantially in the manner and for the purposes herein described."

No. 3007. Wm. Rankin, of New York, N.Y., for an "Improvement in tents."

"I claim the combination of the lateral hinged, adjustable braces C, with the divided hinged bars B, and pole A, as herein shown and described. I also claim the combination of the sacking D, with the hinged adjustable braces C, bars B, and pole A, substantially as herein shown and described."

No. 3008. Rensselaer Reynolds, of Stockport, N.Y., for an "Improvement in friction clutches."

"I claim connecting the longitudinally sliding sleeve with the radial arms of the sector friction brakes, so that when the same is liberated the centrifugal force generated by the rotation of the brakes before the clutching takes place, will force the friction brakes outward against the inner periphery of the fast pulley, and thereby clutch the same, and by moving the sleeve longitudinally on the hub of the loose pulley in one direction shall by means of the inclined planes cause the sector friction brakes to move away from and break contact with the inner periphery of the fast pulley, thus unclutching or disconnecting the pulleys by inclined planes and clutching the same wholly by centrifugal force, substantially as described."

No. 3009. Alexr. K. Rider, of Hydeville, Vermont, for an "Improvement in cut off gear for steam engines."

"I claim the employment for controlling the closing movements of the cut-off valves, of two obliquely arranged sectors or segments L, L', on a shaft or rod K, which has a longitudinal reciprocating movement and an oscillating movement upon its axis, derived substantially as herein described."

No. 3010. E. P. Russell, of Manlius, N.Y., for an "Improvement in harvesters."

"I claim, first, the conical rollers in combination with the oval or bead on the flange, as set forth and described. Second, I claim the oval or bead on the flange *c*, either without or with the level from the shaft to the edge of the flange, as set forth and described."

No. 3011. John Scheeper, of New York, N.Y., for an "Improvement in mode of securing carriage wheel hubs on axles."

"I claim the hub A, axle journal B, flanged cap D, pin *b*, collar *a*, band *e*, and screw *d*, when combined, arranged, and operating in the manner substantially as described."

No. 3012. Anthony Smith, of Hartford, Conn., assignor to himself and Wm. H. Bradley, of same place, for an "Improvement in revolving fire-arms."

"I claim the improved method of ejecting the discharged cartridge by the simple act of inserting a fresh one in the rear thereof, substantially as herein described, by means of suitable depressions or openings of the frame or stock of the fire-arm both in the rear and in front of the perforated cylinder, and in line therewith, the cartridge being held in place by the double retaining springs *i* and *i*', or either mechanical equivalents, substantially as shown, so that the said arm may be kept in constant readiness for firing by the single operation of continued loading."

No. 3013. C. Stauf and C. J. Steinbach, of Saint Louis, Missouri, for an "Improvement in portable battery or platoon gun."

"I claim a portable battery or platoon gun consisting of a horizontal chambered cylinder, or its equivalent, with divergent barrels, all constructed and operated substantially as described, and for the purpose set forth."

No. 3014. Alex. C. Twining, of New Haven, Conn., for an "Improvement in apparatus for cooling and freezing."

"I claim, first, the construction of freezing cisterns by pipes ranged in 'stacks,' in combination with a supply or an exit pipe and connecting channels conducting the circulation from one stack or cistern to another, all substantially as above, and whether with or without the cocks. Second, I claim the four way cocks in their construction, and the combination of those cocks, or their equivalent, with the channels and the stacks or with the stacks directly. Third, I claim the equalizer. Fourth, I claim the combination of the splash pump with the cisterns by pipes and valves, substantially as above. Fifth, I claim the combination of an air pump with a tightly covered vessel or vessels to draw air from the vessels and contents during freezing by intervening pipes or connections. Sixth, I claim the peculiar mode of connecting the stacks with the channels, and channels with the cocks or other pieces, as shown and described."

No. 3015. Wm. Van Anden, of Poughkeepsie, N.Y., for an "Improvement in harvesters."

"I claim, first, the combination of the adjustable bolts O, O, with the adjustable bars R, and with the main frame and axle for the purpose and in the manner heretofore described. Second the combination and arrangement of the adjustable cutter bar holder U and cutter V with the finger bar E, substantially as described, and for the purpose hereinbefore set forth."

No. 3016. John H. Wells, of Brooklyn, N.Y., for an "Improvement in automatic primer for fire-arms."

"I claim, first, the combination with a fire-arm of a hopper and a slide or its equivalent, which is operated by the cocking and letting go the hammer of the gun, and by other manipulation of the arm to bring and deliver the priming pills to and at the point of explosion, said parts being so constructed and arranged as before described, as to receive the said pills from the mass without any previous arrangement in order being necessary, and to deliver them single in succession, as set forth. Second, the combination of the slide 4, vibrating arm or catch 7, or other catch performing its functions, catch 8, and spring 10, substantially as described, for the purpose of attaching the slide to and detaching it from the hammer, so as to make it operative or otherwise as desired, for the purpose set forth. Third, the construction as described of the chamber or reservoir for containing the pills or priming material in two compartments, so formed and arranged with reference to each other that the smaller compartment of the one which is over the opening in the slide will receive the pills freely from the other compartment, and have a tendency to retain them, substantially as set forth."

No. 3017. John Wilson, of Chicago, Illinois, for an "Improved manufacture of fibrous waterproof fabrics."

"I claim the new article of manufacture herein described, constituting a waterproof fabric, having both surfaces capable of securing a cloth finish."

No. 3018. Joseph Wood, of Red Bank, N.J., for an "Improvement in frogs for railroads."

"I claim the combination of rails *h* and *l*, connected together and prolonged from the rails *e* and *b* with the frog point *n*, in the manner and for the purposes specified."

No. 3019. James S. Yerk, and G. H. Heming, of Tiffin, Ohio, for an "Improvement in bridges."

"I claim, 1st, the use of the longitudinally described tubes in the construction of truss-frames, substantially as described. 2nd, casting or moulding the panels of truss-frames in longitudinal sections, each section embracing half of the upper chord and cross-braces and a portion of the shoe or heel posts, as set forth. 3rd, the manner above described, of connecting the sections of one panel to those of another in truss-frames, when the said connections embrace within themselves the shoes or heel-posts, as stated."

No. 3020. J. A. De Brame, of New York, N.Y., assignor to himself and Jeremiah Gurney, of same place, for an "Improvement in revolving ordnance."

"I claim the combination of the screw F, constructed as set forth, so as to serve as nipple vent and cylinder presser, with the frame A, and revolving chamber C, all as herein set forth. I also claim the combination of the perforated disk G, with the said screw F, frame A, and cylinder C, as herein set forth."

No. 3021. J. A. De Brame, of New York, N.Y., assignor to himself and Jeremiah Gurney, of same place, for an "Improvement in breech-loading ordnance."

"1st, I claim the axis pin *a*, having a shoulder *r*, and fitted to the cylinder frame F, and rotating many chambered cylinder, substantially as herein described, and furnished with a screw thread receiving a nut M, applied in rear of the cylinder frame, to operate substantially as herein set forth for the purpose of making a tight joint between the open rears of the chambers and a breech formed by the rear end of the cylinder frame. 2d, the combination with the rotating many chambered cylinder H, of the ring N, the lever O, the spring tooth W, and the stop pin Z, said tooth and pin operating in combination with notches *y*, *y*, in the cylinder, substantially as and for the purpose herein specified."

No. 3022. Bela A. Mann, of West Meriden, Conn., assignor to Jedediah Wilcox and H. H. Miller, of same place, for an "Improvement in machines for clasping hoops to ladies' skirts."

"1st, I claim the inclined hopper F, and feeding plate G, when arranged so as to be adjusted by the rods D, T, and used in connection with a clinching device, for the purpose herein set forth. 2d, the bars *i*, *j*, placed obliquely on the feeding plate G, provided with grooves *l*, and used in connection with the slot or opening *p*, substantially as and for the purpose set forth. 3rd, the passage way for the clasps K, formed of the plates *m*, *m*, attached to the head or bar H, and grove *n* made therein, when said passage way is used in combination with the feeding plate G and the clinching device and arranged therewith, as and for the purpose specified. 4th, the clinching device formed of the plate J, attached to lever B, or its equivalent, and provided with the ledge *w*, having a concave or grooved upper surface, in combination with the clasp sustaining plates I, I, attached to the head or barrel H, and arranged in relation with the plates *m*, *m*, and, groove *n*, substantially as and for the purpose herein set forth."

No. 3023. Conrad Marquardt, of Prinebeck, N.Y., assignor to Maria L. Marquardt, of same place, for an "Improvement in whiffle tree attachment."

"I claim attaching or connecting the whiffle trees D, D, to the double tree A, by means of the links E, E, racks B, B, and the springs F, F, arranged substantially as set forth."

No. 3024. J. F. Leitch, of Greene, of N.Y., assignor to Orrin D. Carter, of same place, for an "Improved fan blower."

"I claim the circumscribed fan room scroll air passage and wind cut-off, all in combination, substantially as and for the purposes specified."

No. 3025. R. B. Pullan, of Cincinnati, Ohio, assignor to Jessie D. Pullan, of same place, for an "Improvement in lamps."

"I claim the making of the double concentric tube (*a*, *b*,) constituting the inner and outer walls of air passage (*e*) by striking it up from a single plate of sheet metal, in the manner herein described. I also claim the combination of the bayonet catch F with the cam (*f*) of the traveling nut (*d*), both as a fastening for the wick tube, and as a means of raising and lowering the wick, substantially as described."

No. 3026. E. D. Rosencrantz, of Cincinnati, Ohio, assignor to himself, John S. Hull, and Nelson Gates, of same place, for an "Improvement in lamps."

"I claim the employment of atmospheric pressure upon the surface of the fluid in the reservoir *x*, *x*, by means of the air pump *w*, w^1, when used with the tubes *o*, *o*, *f*, *f*, and valve at d^1 in a lamp, substantially as described. I claim the air pump *w*, w^1, when used in combination with the reservoir *x*, *x*, filling tube *p*, and escape valve tube *r*, in the manner and for the purposes substantially as set forth. I claim the employment of the burner and heater when constructed with curved wings *b*, *b*, as described, when used with the tube (*a*) having an opening (a^1), in the manner substantially as set forth."

No. 3027. Charles H. Sayre, of Utica, N.Y., assignor to himself and Charles E. Barnard, of same place, for an "Improvement in projectiles for rifled ordnance."

"I claim the employment in combination with a leaden or other soft metal band, applied to a cast iron projectile of a lining tube *b*, of wrought or malleable iron or other suitable tough or tenacious metal attaching the said band to the head or body of the projectile, in the manner substantially as herein specified."

No. 3028. Thomas Shaw, of Philadelphia, Pa., assignor to himself and B. Hart, of same place, for an "Improvement in revolving fire arms."

"I claim the combination of the pall G with the arm K, substantially as described and for the purpose set forth."

No. 3029. Joseph Young, of Varick, N.Y., assignor to Jna. B. and Jas. Young, of same place, for an "Improvement in machines for removing the husks from corn."

"I claim the combination of the cutting apparatus with the fan blast and separator, arranged and operating substantially as and for the purpose set forth."

No. 3030. Edwin Corner, of Columbus, Ohio, for an "Improvement in bee hives."

"I claim hinging the comb frames in steps, so that the several frames may be swung open at the same time, as described, in combination with the hinged door and stationary central frame, substantially as and for the purpose specified."

No. 3031. John Dean, of Worcester, Mass., for an "Improvement in mats for daguerreotypes, &c."

"I claim forming from sheets of metal mats with their corners clipped or cut-off and finishing the said corners so as to conform with the outer bevel, and to form supports for sustaining the said mats upon the photograph or other plates, in the manner and for the purposes herein set forth."

No. 3032. G. F. Holland, of Leominster, Mass., for an "Improvement in mode of attaching breeching to shafts of carriages."

"I claim the particular combination and arrangement herein described, the same consisting of a spring clutch attached to the harness and a fixed stud or standard permanently affixed to the shaft, the two operating together substantially as described."

No. 3033. Geo. Keene, of Lynn, Mass., for an "Improvement in heels for boots and shoes."

"I claim as a new article of manufacture a heel formed of successive rises, united by nails which are driven and clinched at the time the heel is compressed, as set forth."

No. 3034. Robert Kershaw, of Philadelphia, Pa., for an "Improvement in gig mills."

"I claim, as an improvement on James Shaw's Patent of 28th August, 1860, raising a nap on textile fabrics by means of two or more card rollers, the latter being caused to revolve at such a speed, and the fabric being so guided by plain rollers, that an alternate slackening and tightening of the said fabric will take place, thereby causing the wires of the rollers to penetrate the fibres and effectually raise the desired nap."

No. 3035. John O'Doris, of Philadelphia, Pa., for an "Improvement in fertalizers."

"I claim the improved fertilizing compound, composed of coal ashes, animal manure, animal matter, and vegetable matter such as herein named in the manner and the proportions herein specified."

No. 3036. Sylvanus Sawyer, of Fitchburg, Mass., for an "Improved fuse hood for shells."

"I claim the employment of a hood or other equivalent device in combination with a fuse substantially in the manner and for the purpose described."

No. 3037. Sylvanus Sawyer, of Fitchburg, Mass., for an "Improvement in mandrel for loading case shot, &c."

"I claim, first, the loading mandrel constructed substantially as described, as an instrument for loading ordnance shells, or any other analogous use. Second, the employment in combination with the loading mandrel of a case or sheath, substantially as described."

No. 3038. N. W. Spaulding, of San Francisco, California, for an "Improvement in sawgummers."

"I claim, 1st, pivoting, or hinging, the double edged punch to the double-edged die as herein recited, whereby the double shear-cut may be made by the gummer. 2nd, I claim in combination with the double-edged die the double-seed punch, as herein described, whereby the one end may be substituted for the other as and for the purpose described."

No. 3039. Thomas W. Adams, of Baltimore, Md., assignor to himself and Charles H. Slicer, of same place, for an "Improvement in men's hats."

"I claim, in the construction of men's hats, when the brims are of flexible or yielding material, giving the front and side curves to the brim by means of a frame of cane, metal, or other material confined within or attached to the brim at or near its circumference, substantially as and for the purposes set forth. I claim in combination with a hat brim constructed as claimed in the preceding clause, the head band O, for the purpose of preserving the symmetry of the body of the hat, substantially as described."

No. 3040. Robert N. Eagle, of N. S. Army, for an "Improvement in saddles."

"I claim attaching the stirrups to a saddle by variable points of suspension, in the manner herein-before explained, or in any other manner substantially equivalent."

Reissues.

No. 144. A. A. Hotchkiss, of Sharon, Conn, administrator of Andrew Hotchkiss, deceased, late of same place, for an "Improvement in projectile for rifled ordnance."—Patented 16th October, 1855; reissued 2nd July, 1861.

"I claim, 1st, constructing a projectile in three parts, one of them of flexible or plastic material in the form of a ring interposed between the other two parts, formed of a harder material, and so arranged that in the act of loading or firing, or of both, the resistance or the explosive effect of the powder acting on a larger sectional area of the part E than the section of the ring C shall cause the latter to be so expanded or distended that it shall take the impression of the grooves, and be made to fit the bore of the gun, as described. Second, locking or securing the expansive material to the body of an expansive projectile by means of one or more lips or projections extending outward from the body of the shot into corresponding recesses in the expansive material as at *i*, or of one or more grooves or recesses in the body receiving internal lips or projections from the expansive material as at *e* or e^1. Third, the tail piece for securing the cap to the body of the shot, and as a guide to the cap in its forward motion, in the manner described."

No. 145. C. M. Wilkins, of West Andover, Ohio, for an "Improvement in cheese vats."—Patented 22nd November, 1859.

"I claim, 1st, the arrangement of the pipe W, heater F, and chamber L, substantially as and for the purpose specified. I claim, 2nd, the combination of the valve N, arm M, to which it is attached, and the lever R, arranged for operating substantially as shown and for the purpose described. I claim, 3rd, arranging either or both of the valves N and O, in combination with their respective pipes over the fire box of the heater, substantially as and for the purpose specified. I claim, 4th, the use of the truss braces J, J, J, in the manner and for the purpose described and shown."

No. 146. Isaac P. Frink, of Newark, N.J., for an "Improvement in reflectors." —Patented 17th April, 1860.

"I claim, 1st, the employment of an oblong pyramidal reflector lined with glass or other diaphanous material, substantially as herein shown and described. 2nd, the combination of the cover B with a pyramidal reflector, substantially as herein shown and described. 3rd, the combination of the hinged adjustable section C, with a pyramidal reflector, substantially as herein shown and described. 4th, the combination of the beads *b*, b^1, with a pyramidal reflector, substantially as herein shown and described. 5th, the combination of the cover B and hinged adjustable section C with a pyramidal reflector, with or without the beads *b*, b^1, substantially as herein shown and described."

No. 147. Cyrenus Wheeler, Jr., of Poplar Ridge, N.Y., assignee of Robert T. Osgood, of Orland, Me., for an "Improvement in grain and grass harvesters."—Patented 17th February, 1852.

"I claim, 1st, two independent driving and supporting wheels on a common axle carrying a rectangular main frame located between said wheels, and suspended from and nearly balanced on said axle, in combination with the cutting apparatus hinged to said main frame, substantially as described. Also, balancing the main frame and mounting the two driving and one main gear wheel on a common axle, in combination with a ratchet wheel for each driving wheel rigidly affixed to the axle, each driving wheel carrying a pawl that will stand in gear with its ratchet wheel when the machine is advanced, and out of gear when the machine is backed, substantially as set forth and described. Also, the down-hangers as points of attachment for the hinges, and to bring the hinges below the main frame, substantially as described. Also, arranging the hinges by which the finger beam is connected to the main frame, and thus advanced over the ground on opposite sides of the centre of motion and at opposite ends of the main frame, substantially as and for the purpose set forth. Also, giving the hinges by which the finger beam is thus connected and advanced over the ground, a common centre or axis of motion, though located at opposite ends of the main frame, substantially as described. Also, so connecting the cutters with the crank that four vibrations of the cutters will be given for every single revolution of the crank, substantially as described. Also, in combination with two independent driving wheels and a hinged cutting apparatus a balance wheel, to equalize the motions of the cutters and give steadiness of motion to the gearing, substantially as described. Also, the combination in a harvesting machine, substantially as described, of a hinged tongue, the main frame, two main supporting wheels, and the hinged cutting apparatus, for the purpose set forth. Also, in combination with a finger beam an adjustable sole, substantially as described. Also, in combination with a finger beam and an adjustable sole a lever, so arranged that the driver can by it, when in his seat, and with the machine in motion, raise or depress the cutting apparatus at pleasure, substantially as and for the purpose described."

No. 148. Cyrenus Wheeler, Jr. of Poplar Ridge, N.Y., assignee of Robert T. Osgood, of Orland, Me., for an "Improvement in grain and grass harvesters."—Patented 17th February, 1851.

"I claim, first, the combination with the main frame, of two independent driving wheels, and a hinged cutting apparatus, whereby the cutters are kept in operation, when the machine is turned, either to the right or left, and the cutting apparatus, or either end thereof, is free to conform to the inequalities of the ground, independent of the up and down motions of the driving wheels, substantially as described. Second, the combination in a mowing machine in the manner herein set forth of the following elements, viz.—a hinged tongue to draw and stead the machine, a frame to carry and support the driver and gearing, two independent driving and supporting wheels to carry the frame and give motion to the cutters, and a short finger bar so hinged to the main frame that its progressive movement over the ground will be controlled by the main frame, and the upward and downward movements of the entire finger beam, or of either end thereof independent of the other end, by the undulations of the ground over which it is drawn, substantially as described. Third, arranging the hinges, by which the finger beam is connected to the main frame, and advanced over the ground, above the plane of the cutters, substantially as and for the purpose herein described. Fourth, in combination with the main frame and finger beam, so arranging the coupling arm Y, that whilst that end carrying the beam can be brought close to, so as to permit the finger beam to travel on the ground, its other end, together with the hinges, will be carried above the ground, and free of obstructions, substantially as described. Fifth, in combination with the main frame, and its supporting wheels, the hinged cutting apparatus located on one side of the central motion and the gearing located on the opposite side thereof, substantially as and for the pur-

pose set forth. Sixth, in combination with the main frame mounted on two independent driving and supporting wheels and a hinged cutting apparatus connected with said main frame, a seat for the driver, so located that the cutters will travel in advance of the driver substantially as and for the purpose set forth."

No. 149. CYRENUS WHEELER, jr., of Poplar Ridge, N. Y., assignee of Robert T. Osgood, of Orland, Me., for an "Improvement in grain and grass harvesters."—Patented 17th February, 1852.

"I claim, first, a hinged finger beam, so connected to or with the main frame that whilst it receives its advancing movements from the main frame it will in its upward and downward movements conform to the surface of the ground over which it passes, substantially as herein set forth. Second, in combination with the main frame and finger beam, the intermediate hinged coupling arm, whereby the progressive movements of the finger beam and cutters shall be controlled by the main frame, whilst in their upward and downward movements they may conform to the undulations of the ground over which they pass. Third, the short finger beam, in combination with the intermediate hinged coupling arm, substantially as described."

DESIGN.

No. 142. THOMAS LYONS, of New Britain, Conn., assignor to Russell and Erwin, Manufacturing Co., of City of N. Y., for a "Design for a horse spur."

EXTENSION.

No. 5399. JOHN F. WINSLOW, of Troy, N. Y., for an "Improvement in rolling and compressing puddlers' balls."—Patented 18th December, 1847.

"I claim the method, substantially as herein described, of compressing or shingling puddlers' balls or loops of iron into blooms by the combination of the cam-formed compresser and two or more rollers, substantially as described. Secondly, I claim the spring or yielding cheeks for setting up the ends of the blooms, in combination with the combined cam-formed compresser and rollers, substantially as described. And, finally, I claim the feeder and discharging follower, in combination with the combined cam-formed compresser and rollers, for the purpose and in the manner described."

LIST of SPECIFICATIONS published during the week ending 18th January, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
20	3*d.*	COBLEY, T.—Manufacturing salts of lead.
1416	3*d.*	CHAPMAN, O.—Dressing and writing case.
1417	3*d.*	BAKER, J.—Finishing cartridge cases.
1418	9*d.*	NICKOLS, D.—Cutting paper, &c.
1419	3*d.*	BAILEY, J., and BAILEY, W. H.—Apparatus for indicating the flow and pressure of liquids, &c.
1420	11*d.*	COLES, H. T.—Locks and bolts, gun locks, &c.
1421	7*d.*	DE MIRIMONDE, L. J. P.—Axle-boxes, &c.
1422	3*d.*	WRIGHT, J.—(*A communication from J. Fitton.*)—Separating foreign matters from wool.
1423	10*d.*	MOORE, S.—Dressing and polishing rice.
1424	3*d.*	RIGBY, H., and LOWE, P. W.—Steam boilers, &c.
1425	3*d.*	STRATFORD, C.—Steering apparatus.
1426	9*d.*	BAKER, G.—Apparatus for churning, beating eggs, &c.
1427	5*d.*	HAMILTON, T., and HAMILTON, J.—Cop tubes.
1428	3*d.*	RUST, J.—Composition for hardening and preserving stone and cement.
1429	3*d.*	TURNER, H., and YATES, T.—Elastic web.
1430	1*s.* 1*d.*	HAWKINS, S.—Expanding tables.
1431	1*s.* 1*d.*	TURNER, H., and YATES, T.—Railway signals.
1432	6*d.*	JOHNSTON, W. O.—Pillars for coal and other mines.
1433	7*d.*	GODFREY, B. D.—Boots and shoes.
1434	9*d.*	LISTER, S. C., and WARBURTON, J.—Treating, spinning, and doubling yarns.
1435	3*d.*	HEWETT, E.—Creating draughts in flues.
1436	3*d.*	SMITH, A.—Drying and purifying wheat, &c.
1437	6*d.*	PLATT, J., and RICHARDSON, W.—Machinery for making bricks.
1438	7*d.*	NEWTON, W. E.—(*A communication from Monsieur Mallat de Bassilan.*)—Maritime railways.
1439	1*s.* 7*d.*	PLATT, J., and RICHARDSON, W.—Cotton gins.
1440	3*d.*	RIDDLE, W., and COOMBS, H. G.—Shop fronts.
1441	9*d.*	VAUGHAN, J.—Railway sleepers.
1442	10*d.*	HARLOW, R.—Fire bridges and tubes for steam boilers.
1443	3*d.*	BALSAC, H. A.—Alarum.
1444	3*d.*	LEELAND, J.—Sacking for bedsteads and couches, &c.
1445	1*s.* 4*d.*	DE SIMENCOURT, H., and BLACKWELL, J. K.—Reverberatory and other furnaces.
1446	3*d.*	BENNETT, S., the younger.—Utilizing waste tubing.
1447	10*d.*	WOOD, W.—Looms for weaving.
1448	3*d.*	CROLL, A. A.—Manufacture of sulphate of alumina.
1449	3*d.*	COWPER, E. A.—Protecting ships of war, &c.
1450	1*s.* 4*d.*	LEOPARD, W.—Railway brakes.
1451	3*d.*	COLE, R. L.—Glove for currying horses, &c.
1452	3*d.*	LANCASTER, C. W.—Sheathing ships and vessels.
1453	10*d.*	CLARKE, J. F.—Apparatus for regulating the supply of fluids.
1454	7*d.*	SANDS, W. A.—Sails.
1455	6*d.*	WHINES, J.—Hinges.
1456	3*d.*	ROBERTSON, W.—Rollers for preparing and spinning fibrous materials.
1457	6*d.*	DU MONT, H.—Photographic apparatus.
1458	1*s.* 3*d.*	WORRALL, J. M., and LAWRENCE, T.—Brushing, raising, and dressing cut pile and looped fabrics.
1459	3*d.*	LATHAM, R. M.—(*A communication from J. C. Kelley.*)—Hooped skirts.
1460	3*d.*	MASON, J.—Substitute for sponge.
1461	10*d.*	HOWARD, J., and BOUSFIELD, E. T.—Hay-making machines.
1462	3*d.*	ROMAN, J.—Economising fuel in the manufacture of chemicals, &c.
1463	7*d.*	O'HANLON, P.—Steam boilers.
1464	5*d.*	MARTIN, J.—Ironing stove.
1465	5*d.*	RYMER, J.—Railways.
1466	3*d.*	HUTCHINSON, J.—Treating wool.
1467	3*d.*	McKAY, J.—Cleaning chimneys or flues.

List of Specifications—*continued.*

No.	Price.	Name of Patentee and Subject-Matter.
1468	3*d.*	Clark, W.—(*A communication from A. Cochet.*)—Composition for cleaning and polishing metals and glass.
1469	7*d.*	Clark, W.—(*A communication from L. D. Trannin.*)—Casks, tubs, &c.
1470	7*d.*	Whitehead, J.—Looms for weaving.
1471	6*d.*	De Montagu, A. L. C.—Conical cover or pot for chimneys.
1472	11*d.*	Armstrong, R.—Marine steam boilers, &c.
1473	10*d.*	Brown, A.—Distilling salt water.
1474	3*d.*	Rollo, D.—Steam valves.
1475	3*d.*	Weller, W.—Supplying fuel to furnaces, &c.
1476	3*d.*	Oldroyd, J.—Combined coloured yarns.
1477	6*d.*	Mason, M.—Flyers and spindles.
1478	3*d.*	Crofts, W.—Manufacture of fabrics by lace machinery.
1479	4*d.*	Whitworth, C. F.—Signalling on railways.
1480	9*d.*	Langdale, J., jun.—Washing machines.
1481	3*d.*	Steart, J.—Treating skins for the manufacture of leather.
1482	1*s.* 1*d.*	Hawdon, M.—Moulds for casting metals.
1483	3*s.*	Romaine, R.—Machinery for steam cultivation.
1484	3*d.*	Varley, C. F.—Electric telegraphs.
1485	3*d.*	Carter, J. B.—Dressing lace, &c.
1486	7*d.*	Henry, M.—(*A communication from P. J. Jarre.*)—Fire-arms.
1487	10*d.*	Schneider, F. E.—Breech-loading fire-arms.
1488	10*d.*	Stevens, C.—(*A communication from A. J. Canu.*)—Crushing and pulverizing machine.
1489	3*d.*	Stevens, C.—(*A communication from J. Chapa and E. Lacaze.*)—Impermeable varnish for leather.
1490	3*d.*	Small, T. O.—Polycidoscope.
1491	3*d.*	Crane, P. M.—Peat fuel.
1492	6*d.*	Harding, J. D., and Winsor, W. H.—Artists' drawing materials and apparatus.
1493	1*s.* 11*d.*	Hughes, E. T.—(*A communication from J. G. Hofmann.*)—Extracting oil from seeds.
1494	3*d.*	Cheyne, C.—Rifle ranges.
1495	2*s.* 4*d.*	Smith, R. W., and Scattergood, D.—Machinery for manufacturing looped fabrics.
1496	6*d.*	Singen, S. B.—Compass cards.
1497	3*d.*	Chalmers, C.—Gas stoves.
1498	7*d.*	Newton, W. E.—(*A communication from C. R. Alsop. J. W. Alsop, and H. Chauncey. junior.*)—Gun stocks.
1499	10*d.*	Walker, W. H.—Hydraulic stage for raising vessels, &c.
1500	9*d.*	Dauncey, J. A.—Apparatus for feeding infants, &c.
1501	3*d.*	Hope, J., and Greenhalgh, W.—Cutting turnips, &c.

*** Specifications will be forwarded by post on receipt of the amount of price and postage (the latter rarely exceeding One Penny). Sums exceeding 5*s.* must be remitted by Post Office Order, made payable at the Post Office, Holborn, to Mr. Bennet Woodcroft, Great Seal Patent Office.

Museum of Patents, South Kensington.

Number of Visitors for the Week ending 18th January, 1862, 3,841.

Since the opening of the Museum Free Daily (May 12, 1858,)—466,712.

THE Museum is opened from 10 A.M. till 10 P.M. Mondays, Tuesdays, and Wednesdays, and from 10 A.M. till 5 P.M. (instead of 4 P.M.) on Thursdays, Fridays, and Saturdays.

After the 1st January, 1862, the Museum will be closed on Wednesday evenings, and opened instead on Saturday evenings, till further notice.

This change will meet the convenience of a large class of engineers, machinists, and others, who in the year 1858 memoralized the Commissioners of Patents for the opening of the Patent Museum on Saturday evenings, a request with which the Commissioners of Patents regretted their inability to comply, owing to difficulties suggested by the Authorities at the South Kensington Museum.

All communications on the subject of the Museum to be addressed to the Superintendent,

B. Woodcroft.

Great Seal Patent Office,
Southampton Buildings.

Gallery of Portraits of Inventors, Discoverers, and Introducers of Useful Arts.—This Collection, formed by Mr. Woodcroft, and first opened to public view in the Great Seal Patent Office in 1853, now constitutes a portion of the Patent Museum at South Kensington.

Presentations of original Portraits, Medallions, Busts, and Statues, in augmentation of the Collection, are hereby invited, and will on receipt be acknowledged in this Journal, and duly recorded in the next published Catalogue.

The above, and all other works published by the Commissioners of Patents, are now on sale at the Great Seal Patent Office, 25, Southampton Buildings, Holborn.

This Journal is published on the evening of Tuesday and Friday, and will be forwarded, post free, to Subscribers.—Terms, 30*s.* per annum.—Subscriptions received at the Great Seal Patent Office, where also single copies, at twopence each, may be obtained.

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THE

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By Authority.

(*Registered for transmission abroad.*)

No. 841. FRIDAY, JANUARY 24, 1862. Price 2d.

Applications for Letters Patent.

(21*st*, 22*nd*, *and* 23*rd January*, 1862.)

150. JOHN STENHOUSE, of 11, Upper Brunswick Terrace, Barnsbury Road, in the county of Middlesex, Chemist, for an invention of "Improvements in the protection of metallic surfaces, and in rendering certain substances less pervious to air and moisture."—Dated 21st January, 1862.

151. JOHN ADAMS KNIGHT, of No. 4, Symond's Inn, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in the permanent way of railways."—A communication to him from abroad by Hiram Carpenter, of the city of New York, in the United States of America.—Dated 21st January, 1862.

152. JEAN FURCY TOURRIER, of 41, Manchester Street, Manchester Square, in the county of Middlesex, for an invention of "The diffusion of heat in houses by means of hot air without extra fire."—Dated 21st January, 1862.

153. CHRISTOPHER BINKS, of Gray's Inn, in the county of Middlesex, for an invention of "Improvements in generating steam, in superheating steam, and in apparatuses employed therein."—Dated 21st January, 1862.

154. JOHN BATE, of No. 18, Crescent, Birmingham, for an invention of "Improvements in machines for corking or stopping the mouths of bottles, jars, or any vessel requiring to be stopped up air-tight."—Dated 21st January, 1862.

155. HENRY BERNOULLI BARLOW, of the city of Manchester, Patent Agent, for an invention of "Improvements in machinery or apparatus for counting and indicating the number of revolutions of shafts or other articles, and for exerting power."—A communication to him from abroad by Arnold Caflisch, of Winterthur, in the republic of Switzerland.—Dated 21st January, 1862.

156. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in machinery for making nails and spikes."—A communication to him from abroad by Carl Gustaf Gustafsgon, a person resident at Hellstorp, near Yönköping, in the kingdom of Sweden.—Dated 21st January, 1862.

157. JAMES HYNDFORD RAWLINS, of Hope Paper Mills, near Wrexham, for an invention of "Improvements in machinery used in the manufacture of paper."—A communication to him from abroad by Oliver Woodworth, resident at New London, Connecticut, United States of America."—Dated 21st January, 1862.

158. ALFRED JOSEPH MARTIN, of High Street, Bow, in the county of Middlesex, Chemist and Druggist, for an invention of "Improvements in the treatment of fusel oil, and for various applications of the same to useful purposes."—Dated 21st January, 1862.

159. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in street and road sweeping machines, parts of which are applicable to the separation of liquid from solid substances."—A communication to him from abroad by Victor Ferdinand Jeauneau, of Cosne, France.—Dated 21st January, 1862.

160. WILLIAM BURGESS, of the firm of Burgess and Key, of Newgate Street, in the city of London, Agricultural Implement Makers, for an invention of "Improvements in reaping and mowing machines."—Dated 21st January, 1862.

161. MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the mode of and apparatus for applying electricity to horology."—A communication to him from abroad by François Victor Guyard, of 33, Boulevart Saint Martin, Paris, France.—Dated 21st January, 1862.

162. William Tozer, of Gracechurch Street, in the city of London, and Archibald Read, of Walworth, in the county of Surrey, for an invention of "Improvements in boots and shoes." —Complete specification.—Dated 21st January, 1862.

163. Louis Martin, Chemist, residing in Paris, No. 13, Rue Gaillon, for an invention of "Improvements in the treatment of mineral oils, and in the apparatus connected therewith."—Dated 22nd January, 1862.

164. Isaac Roberts, of Liverpool, in the county of Lancaster, Contractor, for an invention of "Improvements in combined hydraulic motive power engines and meters."—Dated 22nd January, 1862.

165. Francis William Gerish, of East Road, City Road, in the county of Middlesex, Engineer, for an invention of "Improvements in printing presses.—Dated 22nd January, 1862.

166. Edmund Pace, of Queen Street, in the city of London, Manufacturer, for an invention of "Improvements in laths for Venetian blinds, in painting such laths, and in raising and lowering Venetian blinds."—Dated 22nd January, 1862.

167. Alfred James Beer, of Canterbury, in the county of Kent, Engineer, for an invention of "Improvements in the valves of steam and other motive engines."—Dated 22nd January, 1862.

168. Thomas Little and John Little, both of Alston, in the county of Cumberland, Grocer and Whitesmith, for an invention of "Improvements in apparatus for cooling coffee berries."—Dated 22nd January, 1862.

169. Joseph Hinks, of Birmingham, in the county of Warwick, Manufacturer, and Adam Dixon, also of Birmingham, in the county of Warwick, Engineer, for an invention of "A new apparatus for warming and drying boots, shoes, or slippers, to be called a 'boot warmer,' which apparatus is also applicable for racking or storing boots, shoes, or slippers, for exhibition or otherwise."—Dated 23rd January, 1862.

170. Jonathan Aldons Mays, of No. 30, Regent Square, in the parish of St. Pancras, in the county of Middlesex, for an invention of "Improvements in envelopes and other wrappers."—Dated 23rd January, 1862.

171. John Tomlinson, of Liverpool, in the county of Lancaster, Iron Bedstead Manufacturer, for an invention of "Improvements in washing machines."—Dated 23rd January, 1862.

172. John Wallace, of Haldane's Mill, near Alexandria, in the county of Dumbarton, North Britain, Smith and Agricultural Implement Maker, for an invention of "Improvements in reaping machines."—Dated 23rd January, 1862.

173. Frederick William Werner, of Mannheim, in the Grand Duchy of Baden, for an invention of "Apparatus for the destruction of vermin."—Dated 23rd January, 1862.

174. William Hooper Ropes, of Crown Court, Old Broad Street, in the city of London, Merchant, for an invention of "Improvements in machinery or apparatus for cleaning coffee, rice, or any seed or grain, having an outer hull and inner pellicle."—A communication to him from abroad by William Maxwell Greene, of Tongoi, Chili, South America, Merchant.—Dated 23rd January, 1862.

175. Henry Owen, of Albert Terrace, Islington, in the county of Middlesex, Manufactrer, for an invention of "Improvements in the manufacture of stockings and other articles of hosiery." —Dated 23rd January, 1862.

176. George Rogers, of Staines, in the county of Middlesex, Plumber, for an invention of "Improved mechanical arrangements for letting-off water or other liquids from butts, vessels, or cisterns,"—Dated 23rd January, 1862.

177. John Creswell Johnson, of the town of Nottingham, Lace Maker, for an invention of "Improvements in the manufacture of twist lace in twist lace machines."—Dated 23rd January, 1862.

178. Abraham Ripley, of Brook Street, Lambeth, in the county of Surrey, Engineer, for an invention of "Improvements in the construction of pistons."—Dated 23rd January, 1862.

179. Henry Yates, of Cecil Street, Strand, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in machinery for bending, repairing, or renewing defective or damaged parts of iron rails."—Dated 23rd January, 1862.

180. James Gowans Service, of Glasgow, in the county of Lanark, North Britain, Manufacturer, for an invention of "Improvements in machinery or apparatus for cutting and scoring pasteboard and other similar material."—Dated 23rd January, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2298. To Timothy Morris, Robert Weare, and Edward Henry Cradock Monckton, all of 4, Trafalgar Square, (Patent Office), in the county of Middlesex, for the invention of "Improvements in batteries for obtaining electric currents and the products therefrom."

On their petition, recorded in the Office of the Commissioners on the 14th day of September, 1861.

2324. To Joseph Girton Briggs, of No. 23, Earl Street, Blackfriars, in the city of London, for the invention of "An improved method of making fire-proof buildings, ships, and o ther constructions."

On his petition, recorded in the Office of the Commissioners on the 18th day of September, 1861.

2431. To Thomas Smith, of Aberdeen Street, Sheffield, Optician, for the invention of "Improvements in the construction of umbrellas adapted to purposes of self-defence, some of which improvements are also applicable to other purposes."

On his petition, recorded in the Office of the Commissioners on the 30th day of September, 1861.

2643. To George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 31, Southampton

Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for the invention of "Improvements in processes or means employed for separating or extracting silver from lead."—A communication to him from abroad by Jules Frederic de la Batie, Advocate, of Paris, in the empire of France.

On his petition, recorded in the Office of the Commissioners on the 23rd day of October, 1861.

2763. To Thomas Spencer, of Prescot, in the county of Lancaster, Earthenware Manufacturer, and Thomas Robinson, of St. Helen's, in the said county, Engineer, for the invention of "Improvements in machinery or apparatus for making pipes and other articles of earthenware, and in the form of pipes, for gas, sewage, and other purposes."—The result partly of a communication from abroad made to them by Alfred Delafal, of Paris, in the empire of France, and partly of invention and discovery made by themselves.

On their petition, recorded in the Office of the Commissioners on the 2nd day of November, 1861.

3113. To William Lightfoot, of Harwell, in the county of Berkshire, Surgeon, for the invention of "An improved bridle."

On his petition, recorded in the Office of the Commissioners on the 12th day of December, 1861.

3175. To Charles Edward Symonds, of No. 56, Stone's End, in the borough of Southwark, Oil and Colour Merchant, for the invention of "Improvements in the treatment and application to various useful purposes of light spirituous liquids.'

3177. And to Jean Marie Hospice Auguste Taurines, of Paris, in the French empire, Constructor, for the invention of "Improved modes of constructing balances, weigh bridges, and other weighing machines."

On both their petitions, recorded in the Office of the Commissioners on the 18th day of December, 1861.

3183. To Eli Stott, of Ashton-under-Lyne, in the County of Lancaster, Machinist, for the invention of "Improvements in apparatus used for collecting and removing the waste and dirt which occurs in the process of spinning cotton and other fibrous materials."

On his petition, recorded in the Office of the Commissioners on the 19th day of December, 1861.

3203. To Dudley Charles Le Souëf, of Twickenham, in the county of Middlesex, England, for the invention of "An improvement in cylinders used in printing calicoes and other textile fabrics."—A communication to him from abroad by Henry Kündig, George Bertschy, and Joseph Porges de Pertheim, of Prague, in Austria.

On his petition, recorded in the Office of the Commissioners on the 20th day of December, 1861.

3207. To Filippo Grimaldi, of Teramo, kingdom of Italy, but now residing at 13, Manchester Buildings, Parliament Street, in the county of Middlesex, for the invention of "Improvements in rotatory steam boilers."

On his petition, recorded in the Office of the Commissioners on the 21st day of December, 1861.

3229. To Jabez Jones, of Liverpool, in the county of Lancaster, Lead Merchant, for the invention of "Improvements in the manufacture of lead, tin, and other metals, or amalgamation of metals of a like nature, fusible at a low temperature into sheets of any thickness or length, and in the apparatus connected therewith."

3231. And to Louis Julien Taulin, Musical Instrument Manufacturer, of 2, Rue Ste. Appoline, Paris, France, and of 4, South Street, Finsbury, London, for the invention of "An improved wind musical instrument."

On both their petitions, recorded in the Office of the Commissioners on the 26th day of December, 1861.

3255. To James Gorton, of Park House, in the parish of Gateshead and county of Durham, Manufacturer, and Bartholomew Henderson, of the South Shore, Gateshead, in the county of Durham, aforesaid, Engineer, for the invention of "Improvements in the manufacture of ropes."

On their petition, recorded in the Office of the Commissioners on the 30th day of December, 1861.

3264. To Neil McHaffie, of 16, Summer Street, Mile End, Glasgow, for the invention of "Improvements in ventilators or valves for regulating the passage of air or other fluids, whether of a gaseous or liquid form."

3275. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in revivifying animal black or charcoal, in collecting ammoniacal gases generated in the revivification, in the clarification of saccharine liquors, and in apparatus employed in the revivification of the black, and in the filtering of saccharine liquors."—A communication to him from abroad by Absalon Hippolyte Leplay and Jules François Joseph Cuisinier, both of Paris, France.

3276. And to Alexander Edward and James Edward, of Dundee, in the county of Forfar, North Britain, Spinners, for the invention of "Improvements in machinery or apparatus for spinning fibrous materials."

On their several petitions, recorded in the Office of the Commissioners on the 31st day of December, 1861.

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2. To Nicolas Charles Szerelmey, of No. 6, Park Terrace, Brixton, in the county of Surrey, Gentleman, for the invention of "Improvements in the manufacture of leather cloth or imitation leather, and in rendering certain fabrics waterproof."

4. And to Thomas Hall, of Odiham Wharf, Odiham in the county of Hants, for the invention of "An improved apparatus for removing weeds from canals, rivers, and lakes, after such weeds have been cut with a chain, scythe, or other machine or implement applicable to that purpose."

On both their petitions, recorded in the Office of the Commissioners on the 1st day of January, 1862

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20. To William Atkinson Fell, of Troutbeck Bridge, Windermere, in the county of Westmoreland, Machine Maker, for the invention of "Improvements in the manufacture of bobbins and in the means or apparatus employed therein."

On his petition, recorded in the Office of the Commissioners on the 2nd day of January, 1862.

28. To James Whitton Arundell, of No. 265, Gresham House, Old Broad Street, in the city of London, Gentleman, for the invention of "An improved method and improved apparatus for treating and dressing ores and minerals, particularly applicable to tin, lead, copper, zinc, and iron ores."—A communication to him from abroad by Mr. Martin Neuerburg, residing at Kalk, Rhenish Prussia.

30. To James Whitton Arundell, of No. 265, Gresham House, Old Broad Street, in the city of London, Gentleman, for the invention of "An improved method of, and apparatus for, communicating motion to fan ventilators, particularly applicable to ventilating mines."—A communication to him from abroad by Mr. Martin Neuerburg, residing at Kalk, Rhenish, Prussia.

32. And to Richard Henry Cotter, of Cambridge Heath, in the county of Middlesex, for the invention of "An improved apparatus for instantaneously lighting certain lamps, and, when desired, extinguishing the same."

On their several petitions, recorded in the Office of the Commissioners on the 4th day of January, 1862.

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38. To John Coryton, of Rolls Chambers, 89, Chancery Lane, W. C., Barrister at Law, for the invention of "An improved type machine."

42. And to William Thomas Kite, of Mongewell Mill, Wallingford, in the county of Berks, for the invention of "Improvements in the manufacture of starch, and in apparatus employed therein."

On both their petitions, recorded in the Office of the Commissioners on the 6th day of January, 1862.

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52. To Samuel Jesson, of Smethwick, in the county of Stafford, Roller, and James Batson, the younger, of Smethwick aforesaid, Iron and Coal Master, and John Moore, the younger, of Langley, near Oldbury, in the county of Worcester, Roll Turner, and James Roberts, of Smethwick aforesaid, Manager of Works, for the invention of "Improvements in the manufacture of gun barrels and wrought-iron tubing."

54. To Joshua Barber, of Preston, in the county of Lancaster, Manager, for the invention of "Improvements in hand mules, consisting of a break and backing-off motion."

56. And to Henry Bessemer, of Queen Street Place, New Cannon Street, in the city of London, for the invention of "Improvements in the machinery and apparatus employed in the manufacture of malleable iron and steel."

On their several petitions, recorded in the Office of the Commissioners on the 8th day of January, 1862.

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60. To James Smith and Stephen Wellstood, of Glasgow, in the county of Lanark, North Britain, Stove and Range Manufacturers, for the invention of "Improvements in cooking stoves or ranges."

62. To Thomas Aldridge Weston, of Birmingham, in the county of Warwick, Mechanical Engineer, for the invention of "A new or improved multiplying gearing for transmitting and multiplying power, which said gearing may be applied to cranes, windlasses, capstans, and presses, and to other purposes where it is required to transmit and multiply power."

64. And to Henri Charvet, of Lille, in the department of the Nord, in the empire of France, Manufacturer, for the invention of "Improvements in the spinning of cotton and in its various applications."

On their several petitions, recorded in the Office of the Commissioners on the 9th day of January, 1862.

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80. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in apparatus for generating and applying steam as a motive power."—A communication to him from abroad by Mr. Louis Arnier, of 29, Boulevart St. Martin, Paris, in the empire of France, Mechanician.

On his petition, recorded in the Office of the Commissioners on the 10th day of January, 1862.

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82. To Henry Charlton, of Birmingham, in the county of Warwick, Merchant and Manufacturer, for the invention of "Improvements in the manufacture of certain kinds of shoes for mules and horses."

On his petition, recorded in the Office of the Commissioners on the 11th day of January, 1862.

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90. To Ferdinand Charles Warlich, of 10, Alma Terrace, New Cross, in the county of Kent, Gentleman, for the invention of "Improvements in the manufacture of artificial fuel."

92. To John Parker, of Ivy House, Bradford, in the county of York, and Joseph Wells and Benjamin Wells, of Bowling, near Bradford aforesaid, Millwrights, for the invention of "Improvements in steam engines, boilers, furnaces, and apparatus in connection therewith or applicable thereto."

94. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in the manufacture of cups, bowls, saucers, and other dished articles and cases."—A communication to him from abroad by Frederic Wilhelm Marx, of Paris, France.

96. To George Hewitt, of Ipswich, House and Land Surveyor, for the invention of "Improvements in apparatus used in the manufacture of drain tiles."

100. And to Charles Neale May, of Devizes, in the county of Wilts, Engineer, for the invention of "Improvements in the manufacture of pastry, and in apparatus for the same."

On their several petitions, recorded in the Office of the Commissioners on the 13th day of January, 1862.

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106. To William Gorse, of Minworth, in the county of Warwick, Manufacturer, for the invention of "An improvement or improvements in machinery for manufacturing the cut nails called brads."

On his petition, recorded in the Office of the Commissioners on the 14th day of January, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given that the petition of

162. William Tozer, of Gracechurch Street, in the city of London, and Archibald Read, of Walworth, in the county of Surrey, praying for Letters Patent for the invention of "Improvements in boots and shoes," was deposited and recorded in the Office of the Commissioners on the 21st day of January, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

24th January, 1862.

1877. William Wigfall, of Sheffield, in the county of York, Brush Manufacturer, for an invention of "Improvements in the manufacture of brushes and brooms."—Dated 26th July, 1861.

1885. James Robertson, of 53, Park Street, Mile End, in the county of Middlesex, Gentleman, for an invention of "Improvements in apparatus for the treatment of bodily pain with hot water, steam, hot air, and the like."—Dated 27th July, 1861.

1887. George Sturrock, of Woolwich, in the county of Kent, Serjeant-Major, Royal Engineers, for an invention of "Improvements in the construction of breech-loading fire-arms."—Dated 29th July, 1861.

1890. Reuben Riley, of Hull, in the county of York, Railway Guard, for an invention of "Improvements in fusee signals, and in means or apparatus for applying or placing them, and fog signals on the rails of railways from the van of a train in motion.'—Dated 29th July, 1861.

1891. William Melrose, of No. 25, Kingsbridge Place, Millwall, in the county of Middlesex, for an invention of "Improvements in the construction of railway wheels."—Dated 29th July, 1861.

1892. Charles Constant Joseph Guffroy, of Lille, in the empire of France, Merchant, for an invention of "Improvemen s in preparing medicinal substances and compouds from the livers of cod and other salt water fish."—Dated 29th July, 1861.

1893. Wentworth Lascelles Scott, of Bayswater, in the county of Middlesex, Analytical Chemist, for an invention of "Improvements in preparing red, purple, and certain other dyes."—Dated 29th July, 1861.

1897. Thomas Bradford, of the Cathedral Steps, Manchester, in the county of Lancaster, and Fleet Street, London, Washing Machine Manufacturer, for an invention of "Improvements in washing, churning, wringing, and mangling machines."—Dated 30th July, 1861.

1898. William Henry Ash, of London, Canada West, Gentleman, for an invention of "Improvements in reaping and mowing machines."—A communication to him from Nicholas Coomes, a person resident at London, Canada West.—Dated 30th July, 1861.

1902. John Matthias Hart, of 76, Cheapside, in the city of London, for an invention of "Improvements in the arrangement or construction of parts of locks or fastenings."—Dated 30th July, 1861.

1906. Joseph Tollansbee Flanders, of Wardrobe Place, Doctors' Commons, in the city of London, Machinist, for an invention of "Improvements in machinery for splitting, dividing, or shaving leather or skins or sheets of manufactured fabrics."—Dated 31st July, 1861.

1914. Edward James Muygridge, of San Francisco, at present residing at No. 6, St. John's Villas, Adelaide Road, St. John's Wood, in the county of Middlesex, for an invention of "Improvements in machinery or apparatus for washing clothes and other textile articles."—Dated 1st August, 1861.

1927. George Fowler Jones, Architect, York, and James Jones, Architectural Carver, York, for an invention of "Improvements in apparatus for protecting and arranging water pipes, and withdrawing water therefrom, and preventing injury thereto by frost."—Dated 3rd August, 1861.

1931. John Henderson, of Saltaire, near Bradford, in the county of York, Carpet Manufacturer, and James Broadley, of the same place, Overlooker, for an invention of "Improvements in means or apparatus employed in weaving."—Dated 3rd August, 1861.

1963. Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention of "An improved wheel-barrow wagon."—A communication to him from abroad by Jean-Mathieu Rey, junior, of Tournon, Ardêche, in the empire of France.—Dated 7th August, 1861.

1988. Charles Lee and Thomas Kemp Mace, of Birmingham, in the county of Warwick, Hatters, for an invention of "An improvement or improvements in backing or covering the backs or foundations of raised and cut pile fabrics."—Dated 9th August, 1861.

1991. Adrien Ferdinand Benjamin Falgas, of 51, Rue de Malte, Paris, in the empire of France, for an invention of "Improvements in the construction of trusses and bandages for hernia, and of hypogastric girdles or belts."—Dated 9th August, 1861.

1992. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 31, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in the construction of tents for military and other purposes.'—A communication to him from abroad by François Aristide Chapelle, Louis Caron, and Alexander Amist, Manufacturers of Paris, in the empire of France.—Dated 10th August, 1861.

2025. Thomas Silvester, of West Bromwich, in the county of Stafford, Manufacturer, for an invention of "Improvements in spring balances or weighing apparatus.'—Dated 14th August, 1861.

2758. Benjamin Brown, of Bury, in the county of Lancaster, Mechanic, and Richard Hacking, of the same place, Machine Maker, for an invention of "Improvements in machinery for pre-

paring cotton to be spun, known as openers, scutchers, and carding engines."—Dated 2nd November, 1861.

2823. ARCHIBALD TURNER, of Leicester, Elastic Web Manufacturer, for an invention of "Improvements in knitting machinery."—Dated 9th November, 1861.

2831. GEORGE FERGUSSON WILSON and GEORGE PAYNE, both of Sherwood Works, Battersea, in the county of Surrey, for an invention of "Improvements in treating fatty and oily matters."—Dated 11th November, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 21st January*, 1862, *inclusive.*)

20th January.

193. JAMES CHILDS, of Windsor House, Windsor Road, Putney, in the county of Surrey, for an invention of "An improvement in applying heat in the manufacture of artificial gums and teeth, and other articles composed of india rubber or gutta percha combined with sulphur."—Dated 21st January, 1859.

206. THOMAS WEBSTER RAMMELL, of No. 16, Spring Gardens, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in atmospheric propulsion, and the structures, tubes, machinery, and apparatus applicable thereto."—Dated 22nd January, 1859.

249. HENRY RAWSON, of Leicester, for an invention of "Improvements in machinery for preparing wool and other fibrous substances."—Dated 27th January, 1859.

252. GEORGE FRANCIS BRADBURY, of Oldham, in the county of Lancaster, and JOSEPH JACKSON KING, of Glasgow, in the county of Lanark, North Britain, for an invention of "Improvements in certain apparatus applicable to sewing-machines."—Dated 27th January, 1859.

291. MICHAEL LOAM, of Treskerby House, Truro, Cornwall, for an invention of "Improvements in machinery for raising sewage and other waters and matters."—Dated 1st February, 1859.

21st January.

201. DAVID MOSELEY, of the Chapel Field Works, Ardwick, in the city of Manchester, Manufacturer of India-rubber and Gutta-percha, for an invention of "Improvements in the manufacture of india-rubber thread."—Dated 22nd January, 1859.

207. CHRISTIAN SHARPS, of Philadelphia, in the state of Pennsylvania, United States of America, Manufacturer of Fire-arms, for an invention of "Improvements in breech-loading repeating fire-arms."—Dated 22nd January, 1859.

258. CHARLES EDWARDS AMOS, of the Grove, in the borough of Southwark, Engineer, and JOHN FRANCIS, of Bangor, in North Wales, Engineer, for an invention of "Improvements in water pressure engines and their application to pumping machinery."—Dated 28th January, 1859.

265. JOSIAH LANE, of West Bromwich, in the county of Stafford, Machinist, for an invention of "New or improved machinery for the manufacture of screws and for tapping nuts for screws."—Dated 29th January, 1859.

372. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Certain improvements in breech-loading fire-arms, and in cartridges to be used with such fire-arms."—A communication from abroad by Gilbert Smith, of the state of New York, in the United States of America.—Dated 9th February, 1859.

443. HENRY YOUNG DARRACOTT SCOTT, of Brompton Barracks, Chatham, in the county of Kent, Captain in the Royal Engineers, for an invention of "An improvement in the manufacture of cement."—Dated 17th February, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

20th January, 1862.

301. GEORGE FERGUSSON WILSON, of Belmont, Vauxhall, Managing Director of Price's Patent Candle Company, and GEORGE PAYNE, of the same place, for an invention of "Improvements in treating glycerine."—Dated 8th February, 1855.

Erratum in Journal of 21st January, 1862.

Page 75, 1st col. For "(*To 17th January*, 1862.)" read "*17th January*, 1862."

COLONIAL PATENTS.—Information as to the Mode of obtaining Protection for Inventions in the Colonies; contained in Communications from the Governors, &c. of the different British Colonies in answer to the Application of Mr. W. J. CURTIS for a Patent. Price 1*s.*

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s.*

EXTENSION OF PATENTS TO THE COLONIES. Abstract of Replies to the Secretary of State's Circular Despatch of January 2, 1853, on the subject of the Extension of Patents for Inventions to the Colonies. Second Edition, with revised Table, 1861. Price 2*s.*

FOREIGN PATENTS.



FRANCE.

CURRENT LIST of PATENTS of Invention and Certificates of Addition.

1861.

(*Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.*)

NOTE.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

50,569. COCHARD, of 1, Quai de la Maison-Rouge, Nantes, for "A hand engine applicable to various purposes, especially for thrashing corn."—Dated 2nd August, 1861.

50,570. DORMEAU, of 45, Rue Bannier, Orleans, for "A mechanism applicable to carriages, and being a substitute for steam."—Dated 25th July, 1861.

50,571. DUBOT, of Mulhouse, for "A toy balloon."—Dated 26th July, 1861.

50,572. DUVEAU, jun., domiciled with Etienne, jun., 4, Rue de Fontenelle, Rouen, for "An apparatus for settling slubs in their boxes, and drawing the same."—Dated 1st August, 1861.

50,573. FAGUIART, domiciled with Dupont-Deparis, and Co., of Valenciennes, for "Sluices with moveable chambers."—Dated 2nd August, 1861.

50,574. FALCOT and Compy., of 99, Cours Lafayette, Lyon, for "Improvements in scales of counting-houses."—Dated 31st July, 1861.

50,575. GAILLARD and TRILLAT, of 33, Rue Vieille-Monnaie, Lyon, for "A kind of square shawls imitating long shawls."—Dated 31st July, 1861.

50,576. GIRARD, GARCIN, and TRASTOUR, of 26, Rue de l'Arsenal, Marseille, for "Sanitary improvements for the destruction of animals and insects."—Dated 30th July, 1861.

50,577. GOBERT and FRANCHE, represented by Zacharie, of 40, Rue de Bourbon, Lyon, for "Artificial clay bitumen."—Dated 31st July, 1861.

50,578. HEYRING and MERCIER, of Auzin, for "A raising apparatus for bagging beetroot pulp in sugar works and distilleries."—Dated 2nd August, 1861.

50,579. JULIEN, Brothers, of Chécy, for "Improvements in apparatus for the manufacture of wine vinegar."—Dated 1st August, 1861.

* For the French Patent Law see No. 228 of this Journal.

50,580. LEFEBVRE, 15, Rue de l'Embranchement, Roubaix, for "A supplementary apparatus for mules for preventing defects in twisting."—Dated 3rd August, 1861.

50,581. MITTELHAUS, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A set of teeth."—Dated 26th July, 1861.

50,582. PASCAUD, of Dax, for "A machine for weaving fences of laths and wire."—Dated 31st July, 1861.

50,583. PETIT, of 3, Rue Ternaux, Paris, for "Colorography on glass and mirrors."—Dated 26th July, 1861.

50,584. PULS, represented by Courronve, of 28, Rue Feydeau, Paris, for "Improvements in extracting products from coal gas, gas pitch, mineral tar, asphalt, and other bituminous and resinous substances." — Dated 27th July, 1861. — (English Patent, 26th December, 1860.)

50,585. REY, of Traverse de l'Eglise, Marseille, for "Applying four grooves to the joints of flat tiles."—Dated 1st August, 1861.

50,586. RICHE, 5, Rue de l'Ecole de Medecine, Reims, for "A perpetual motion applicable to the higher mechanics."—Dated 2nd August, 1861.

50,587. RIEU, of Avignon, for "A process for converting naphthaline into a tinctorial substance, called 'Naphthalic violet.'"—Dated 1st August, 1861.

50,588. SALETTE, of 21, Quai de Rive-Neuve, Marseille, for "An apparatus for shivering sails."—Dated 30th July, 1861.

50,589. SIBOT, of 25, Rue Vieille-Poterie, Orléans, for "A composition for rendering plaster and soft stone indestructible, and giving them the polish of marble and stucco, being also applicable to glueing crystal, porcelain, wood, &c."—Dated 2nd August, 1861.

50,590. TEINTURIER and Company, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Treatment of copper ores by the wet process."—Dated 26th July, 1861.

50,591. THIRY, of 9, Rue Bergère, Paris, for "A spring label-holder."—Dated 27th July, 1861.

50,592. TOUSSAINT, domiciled with Armengaud, of 45, Rue St. Sébastien, Paris, for "A dynamometric pulley."—Dated 27th July, 1861.

50,593. VANDENVINNE, domiciled with Desrousseaux, 11, Rue du Palais, Nord, for "A brick-machine."—Dated 5th August, 1861.

50,594. VERDON, of 28, Boulevart Rougier, Marseille, for "A multiform desk."—Dated 30th July, 1861.

50,595. BÉGUE, of 43, Rue Neuve, Marseille, for "A system of navigation."—Dated 3rd August, 1861.

50,596. BERTREN, of 14, Rue des Trois-Pavillons, for "A lime-kiln."—Dated 29th July, 1861.

50,597. BEZANSON, of 23, Rue de Saint-Quentin, Paris, for "Armour-plates of vessels."—Dated 29th July, 1861.

50,598. BLANZY and Company, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in machines for cleaning and

polishing bands of tempered or untempered steel."—Dated 27th July, 1861.

50,599. Bourgeois and Bombled, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A mechanical templet for looms."—Dated 27th July, 1861.

50,600. Coninx, represented by Coninx, of 21, Rue des Saints-Peres, Paris, for "Treatment of iron."—Dated 30th July, 1861.

50,601. Coquatrix, of 45, Rue Folie-Méricourt, Paris, for "Mosaic carpets."—Dated 27th July, 1861.

50,602. Corbe, domciled with Laudet, 18, Impasse du Maine, Paris, for "A machine for the manufacture of wooden shoes."—Dated 27th July, 1861.

50,603. De Clercq and Company, represented by Ricordeau, of 23, Boulevart de Strasboug, Paris, for "So-called pump or hydraulic fly-wheels for raising water or other liquids."—Dated 23rd July, 1861.

50,604. Duclos, of Bellac, for "An economical coffee-machine."—Dated 3rd August, 1861.

50,605. Dumas, of Clermont-Ferrand, for "Various applications of various furnaces to cutlery works, and of a secondary grate to all furnaces in general."—Dated 31st July, 1861.

50,606. Flament, domiciled with Lestiboudois, 40, Rue Bonaparte, Paris, for "An apparatus applicable to garden-rakes."—Dated 30th July, 1861.

50,607. François, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "Handles and nozzles of kettles, cans, and jugs, angular pieces of pumps and syphons, and of a single piece of wrought iron and sheet iron."—Dated 27th July, 1861.

50,608. Happe, of 281, Rue St. Denis, Paris, for "Table knives."—Dated 30th July, 1861.

50,609. Henson, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in the manufacture of oil cloth for floors, and means of ornamenting the same, the latter being also applicable to oil cloth in general, leather, and to the so-called 'American leather.'"—Dated 29th July, 1861.

50,610. Kuhner, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A metallic calorimeter for kitchen ranges and stoves, &c."—Dated 29th July, 1861.

50,611. Lemarchand, represented by Lemarchand, senr., of Au Houlme, for "Improvements in devilling machines."—Dated 3rd August, 1861.

50,612. Libotte, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A fire grate for steam engines and other generators."—Dated 29th July, 1861.

50,613. Lion, represented by Bresson, of 51, Rue de Malta, Paris, for "Fastenings of bracelets with a safety spring."—Dated 29th July, 1861.

50,614. Mallard, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "A dancing petticoat, called 'Discreet petticoat with flounces."—Dated 27th July, 1861.

50,615. Monduit and Bechet, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A filtering apparatus of cast-iron with bronze gauging cocks for controlling the filtered liquid."—Dated 29th July, 1861.

50,616. Paul-Morin and Company, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Manufacture of green of manganese."—Dated 29th July, 1861.

50,617. Pradier and Vautrin, of 235, Rue du Faubourg St. Martin, Paris, for "Applying cocks to feed pumps of steam engines."—Dated 29th July, 1861.

50,618. Quéruel and Robineau, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Ornamental sculpture."—Dated 27th July, 1861.

50,619. Risse, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in metallic manometers."—Dated 29th July, 1861.

50,620. Ritaud, represented by Mathieu, of 45, Rue St. Sebastien, Paris, for "Improvements in the manufacture of cops for weaving."—Dated 27th July, 1861.

50,621. Savreux, of Amiens, for "Improvements in foot-coverings."—Dated 3rd August, 1861.

50,622. Seiler, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Aero-hydraulic sluices of canals."—Dated 27th July, 1861.

50,623. Smart and Aitchison, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in the manufacture of charcoal."—Dated 29th July, 1861.

50,624. Tajan, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "A dentifrice liquid."—Dated 30th July, 1861.

50,625. Villeneuve, represented by Mathieu, of 45, Rue St. Sebastien, Paris, for "Improvements in apparatus for collecting photographs."—Dated 29th July, 1861.

Certificates of Addition.

49,105. Amson, for "An album."—Dated 24th June, 1861.

49,988. Berthelot, for "A hosiery frame."—Dated 22nd June, 1861.

37,468. Boucher, for "Tinning cast-iron."—Dated 26th June, 1861.

37,346. Camus, Giboire, and Petit, for "A railway."—Dated 19th June, 1861.

47,819. Carré, for "A mechanical lamp."—Dated 24th June, 1861.

42,684. Charvin, for "Dyeing."—Dated 3rd July, 1861.

42,840. Coignet, for "Public roads."—Dated 21st June, 1861.

32,796. Costallat, for "Expansion of lighting gas."—Dated 19th June, 1861.

45,921. Creuzot-Debachy, for "A buckle with a double pressure."—Dated 4th July, 1861.

49,708. Daunizeau, for "A harvester."—Dated 1st July, 1861.

28,551. Dechaux-Bardey, for "Doubling and throwing spun substances."—Dated 5th July, 1861.

40,028. Defrance, for "A camera obscura."—Dated 25th June, 1861.

35,114. Delcamp, for "A keyboard for pianos."—Dated 24th June, 1861.

46,334. Doury, for "A parallel ruler."—Dated 21st June, 1861.

49,175. Dugdale, for "A regulator of motors."—Dated 19th June, 1861.

33,056. Gillon, for "Lighting."—Dated 15th April, 1861.

33,056. Gillon, for "Lighting."—Dated 23rd April, 1861.

33,056. Gillon, for "Lighting."—Dated 4th May, 1861.

33,056. Gillon, for "Lighting."—Dated 28th May, 1861.

48,264. Imbs, Brothers, for "Montagnac dressing."—Dated 26th June, 1861.

28,036. Jacquier, for "A coffee machine."—Dated 19th June, 1861.

50,158. Klotz, Brunchswig, Henlé and Company, for "A cravat with a moveable fastening."—Dated 25th June, 1861.

44,711. Lafon, for "Chromo-lithographic impression on glass."—Dated 21st June, 1861.

45,671. Latour du Moulin, for "A motor."—Dated 24th June, 1861.

28,970. Lemercier, for "Foot coverings."—Dated 22nd June, 1861.

46,278. Lion and Company, for "Fastenings of bracelets."—Dated 25th June, 1861.

45,674. Marcet, for "Harness of looms."—Dated 28th June, 1861.

43,407. Mouneyres, for "A winnowing apparatus applied to thrashing machines."—Dated 2nd July, 1861.

29,660. Morane, for "Candles."—Dated 18th June, 1861.

45,775. Mottin, for "Sizing thread."—Dated 6th July, 1861.

48,786. Noirot, for "Caoutchouc pipes."—Dated 19th June, 1861.

37,886. Pape, for "Keyboard instruments."—Dated 22nd June, 1861.

48,167. Pascal, for "A motor worked by combustible gas."—Dated 20th June, 1861.

47,694. Picard, for "Vegetable wool of hops."—Dated 19th June, 1861.

45,777. Poitevin, for "Photographic impressions on glass."—Dated 26th June, 1861.

49,565. Queruel, for "Sugar."—Dated 21st June, 1861.

45,421. Simonot, for "Hosiery."—Dated 3rd July, 1861.

45,781. Stilmant and Allain, for "A brake."—Dated 26th June, 1861.

48,508. Ab-der-Halden and Seiler, for "Cleaning and smoothing thread."—Dated 27th June, 1861.

48,885. Arthaud, for "Metallic application of embroidery."—Dated 4th July, 1861.

47,670. Bernard, for "A perpetual pump."—Dated 9th July, 1861.

48,249. Bonnet, for "An apparatus for mounting and unmounting furniture."—Dated 12th July, 1861.

49,893. Boudouresque, for "A gas carburator."—Dated 12th July, 1861.

49,169. Carteron, for "Paper pulp."—Dated 12th July, 1861.

49,142. Castendet, for "Blinds."—Dated 26th June, 1861.

34,561. Chenel, for "A husking machine."—Dated 15th July, 1861.

48,026. Colas, Brothers, for "Breaks for rolling mills."—Dated 27th June, 1861.

44,126. Cordes, for "A machine for screwing foot-coverings."—Dated 27th June, 1861.

33,513. Cordier, for "A flourish piston."—Dated 27th June, 1861.

38,582. Corne, for "Manure."—Dated 28th June, 1861.

19,206. Curé, for "Cast iron frame."—Dated 15th July, 1861.

49,619. Diquey, Brothers and Company, for "Electric telegraphs."—Dated 3rd July, 1861.

42,066. Fontenay, for "A smoke consuming fire place."—Dated 8th July, 1861.

42,971. Gauthier, for "Crushing substances."—Dated 12th July, 1861.

49,526. Godefroy, for "An antimephitic apparatus."—Dated 22nd June, 1861.

47,269. Gohin, for "Teaseling stuffs."—Dated 9th July, 1861.

46,976. Goullioud, for "A cylinder of looms."—Dated 4th July, 1861

49,332. Idjiez, for "Photographs."—Dated 6th July, 1861.

40,718. Jarre, for "A combined musket, rifle, and pistol."—Dated 8th July, 1861.

49,273. Lavignac, for "Sugar."—Dated 2nd July, 1861.

45,835. Leroux, for "Sofa-bed."—Dated 3rd July, 1861.

42,854. Létrange, for "Pipes."—Dated 5th July, 1861.

46,600. Lobry, for "A machine for obtaining saw dust."—Dated 5th July, 1861.

46,348. Louis Talot, for "Perfumery."—Dated 4th July, 1861.

29,688. Manceaux, for "Breech-loading fire-arms."—Dated 27th June, 1861.

38,688. Migeot de Baran, for "A syphon for gaseous liquids."—Dated 8th July, 1861.

36,195. Mirland, for "Apple-paste."—Dated 15th July, 1861.

39,433. Mongin, for "A saw."—Dated 6th July, 1861.

45,866. Murtin, for "A spindle for winding and twisting."—Dated 16th July, 1861.

47,691. Olier, for "Safety paper."—Dated 5th July, 1861.

48,167. Pascal, for "A motor worked by combustible gas."—Dated 3rd July, 1861.

45,778. Poussier, for "Bichromate of potash and soda."—Dated 27th June, 1861.

45,908. Rennes, for "An oyster apparatus."—Dated 4th July, 1861.

45,851. Reynier, for "Chafing dish."—Dated 10th July, 1861.

48,174. Rumini, for "Felt hats."—Dated 27th June, 1861.

49,696. Shepard, for "Treatment of gutta percha."—Dated 4th July, 1861.

45,879. Veyrou, for "A thrashing machine with a moveable horse gin."—Dated 11th July, 1861.

49,543. Weil, for "Purifying cane juice."—Dated 3rd July, 1861.

48,123. Bezon and Berthod, for "Seamless gloves."—Dated 10th July, 1861.

43,579. Blondeau, for "A draining pump."—Dated 15th July, 1861.

50,337. Bonod, for "An album."—Dated 13th July, 1861.

44,026. Briens, for "Pedals."—Dated 12th July, 1861.

44,350. Brison, for "Heating."—Dated 24th July, 1861.

47,883. Cauzique, for "Paper pulp."—Dated 10th July, 1861.

47,541. Chaunier, for "A plane."—Dated 13th July, 1861.

41,392. Chesneau, for "A propeller with paddles and hydraulic wheel."—Dated 13th July, 1861.

29,180. Dalemagne, for "Silicating stone."—Dated 13th July, 1861.

48,956. Douchain, for "Canalization for the supply of water."—Dated 10th July, 1861.

42,358. Duros, for "Shirts."—Dated 17th July, 1861.

46,682. Dusterwald, for "An artesian pump."—Dated 13th July, 1861.

40,490. Evrard, for "Lubricating revolving arbors."—Dated 27th July, 1861.

46,531. Henley, for "A press for pressing fruit and roots."—Dated 15th July, 1861.

46,881. Higgin, for "A railway."—Dated 17th July, 1861.

50,349. Jardin, for "Controlling yards."—Dated 12th July, 1861.

48,106. Lacroix, for "A smoke-consuming furnace."—Dated 13th July, 1861.

45,670. Lacroux, for "A table bed."—Dated 11th July, 1861.

46,468. Lefebvre, for "Albumen."—Dated 15th July, 1861.

41,694. Le Mat, for "A revolver."—Dated 17th July, 1861.

50,358. Mallet, for "A toy gun."—Dated 16th July, 1861.

43,853. Mare St. Lambert, for "Lubricating axles of carriages."—Dated 13th July, 1861.

48,752. Maroni, for "Telegraphs."—Dated 15th July, 1861.

50,074. Mathieu, for "Fastening letter bags."—Dated 10th July, 1861.

41,881. Migeot de Baran, for "Stoppering syphons."—Dated 10th July, 1861.

39,433. Mougin, for "A saw."—Dated 13th July, 1861.

47,691. Olier, for "Safety paper."—Dated 13th July, 1861.

49,161. Pasquier, for "Drying."—Dated 16th July, 1861.

45,650. Peltier, for "A mowing machine."—Dated 10th July, 1861.

45,808. Pichot, for "A mechanical press."—Dated 23rd July, 1861.

50,010. Pradier, for "Cocks."—Dated 12th July, 1861.

46,761. Rousset, for "A plough for vineyards."—Dated 23rd July, 1861.

45,421. Simonot, for "Hosiery."—Dated 17th July, 1861.

45,969. Smitter, for "Breaks."—Dated 16th July, 1861.

46,191. Soleirol, for "A gymnastic arm chair."—Dated 15th July, 1861.

45,875. Texier, for "Axle boxes."—Dated 19th July, 1861.

45,486. Transon, for "Destroying insects."—Dated 20th July, 1861.

48,247. Wavran, for "Heating."—Dated 4th April, 1861.

Current List of Patents of Invention.

50,626. Aury, of Quartier Saint-Just, Lyon, for "Improvements in pins of shuttles."—Dated 8th August, 1861.

50,627. Boulle, of 26, Rue d'Annonay, St. Etienne, for "Smelting anvils of cast steel."—Dated 10th August, 1861.

50,628. Boutet, of Perpignan, for "A system of telegraphic messages for preventing railway collisions."—Dated 1st August, 1861.

50,629. Capet, of 50, Rue Neuve de Fontenoy, Roubaix, for "Collars or rings of looms."—Dated 8th August, 1861.

50,630. Charlant, of Arras, for "An instrument for tuning pianos one's self."—Dated 5th August 1861.

50,631. Charlet and Coulon-Destouches, domiciled with Bourard, 1, Rue J. J. Rousseau Paris, for "Manufacture of collars and ruffles."—Dated 29th June, 1861.

50,632. Chevalier, of Vienne, for "Simplified axles lubricated by oil."—Dated 3rd August, 1861.

50,633. Clément, of Rue du Donjon, Epernay, for "Aeriferous taps for the daily draught of wine or other liquids from casks."—Dated 12th August, 1861.

50,634. Clunet, of 17, Rue Vieille Monnaie, Lyon, for "A mechanism for dry rubbing and washing apartments."—Dated 7th August, 1861.

50,635. Combes, of 67, Rue du Faubourg St. Denis, Paris, for "An elythroid pessary."—Dated 9th July, 1861.

50,636. Coué, of 9, Rue Tholozan, Lyon, for "A compensation apparatus for regulators of looms."—Dated 8th August, 1861.

50,637. Delor, of 3, Rue Bardineaux, Bordeaux, for "A brougham."—Dated 9th August, 1861.

50,638. Gardilanne, of Dax, for "Metallic fences woven by machine with single and double knobs, and single and double chains of wire."—Dated 3rd August, 1861.

50,639. Jean-Jean, of au Grand Gallargues, for "A composition for the destruction of bugs."—Dated 9th August, 1861.

50,640. Judice, of Mulhouse, for "A pump tap."—Dated 1st August, 1861.

50,641. Porcq, of Abbeville, for "A process for preventing woollen fabrics from shrinking in washing."—Dated 6th August, 1861.

50,642. Louvrier, of Lods, for "A machine for forging nails for the navy and others."—Dated 8th August, 1861.

50,643. Minet and Comp., and Léte, of Laon, for "Manufacture of white gilt sparkling wine, silver wine, and of both gilt and silver wine."—Dated 7th August, 1861.

50,644. Morel, of Roubaix, for "A combing machine."—Dated 7th August, 1861.

50,645. Munier, of 110, Grande Rue, Sens, for "A paletot."—Dated 12th August, 1861.

50,646. Noyrit, of 7, Rue St. Denis, Nantes, for "A system of removing the mud from basins by the action of the water itself."—Dated 6th August, 1861.

50,647. Patin, of Rue Neubourg, Elbeuf, for "A life belt."—Dated 7th August, 1861.

50,648. Petit, of Cambrai, for "Scouring wool by resin."—Dated 7th August, 1861.

50,649. Peuschgens, of 28, Rue du Molinel, Lille, for "A fire-engine."—Dated 8th August, 1861.

50,650. Rémond, of 4, Grand Rue de Batignolles, Paris, for "A machine for the manufacture of matches, and for putting them into frames."—Dated 29th June, 1861.

50,651. Rieger, domiciled with Rissler, Cernay, for "An apparatus for cleaning top-cards."—Dated 7th August, 1861.

50,652. Rivet, of Rue de Mer, Fécamp, for "A paint for painting the keel of vessels."—Dated 7th August, 1861.

50,653. Ruffier, of 13, Rue du Temple, Troyes, for "An hydraulic engine."—Dated 5th August, 1861.

50,654. Sabatier, of Portet, for "An instantaneous winding machine."—Dated 7th August, 1861.

50,655. Savy and Coulon, of 13, Rue St.-Dominique Lyon, for "An hydraulic counter."—Dated 5th August, 1861.

50,656. Souvignet, of 17, Rue St. Pierre, Lyon, for "Gum balls."—Dated 2nd August, 1861.

50,657. Arthuis, of Bazouges, for "A moveable horse-gin applicable to thrashing machines and to various agricultural and industrial machines."—Dated 2nd July, 1861.

50,658. Bajard, of 1, Rue Tilsit, Marseille, for "A kind of hat called 'Mesh-hat.'"—Dated 10th August, 1861.

50,659. Beau, of 11, Rue de la Monnaie, Paris, for "A copying machine for copying letters by mere contact."—Dated 1st August, 1861.

50,660. Bernard, of 3, Quai Voltaire, Paris, for "Applying cards, loto, dominoes, and dies to various games."—Dated 1st August, 1861.

50,661. Bruckshaw and Underhill, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machines for raising corn and other similar substances."—Dated 1st August, 1861.

50,662. Cheron and Duperrier, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of forks and spoons."—Dated 1st August, 1861.

50,663. Deliry, represented by D'Aubreville, of 60, Boulevart de Strasbourg, Paris, for "Improvements in kneading troughs."—Dated 30th July, 1861.

50,664. Desponts, of 7, Rue Neuve-Popincourt Paris, for "A match-case."—Dated 31st July, 1861.

50,665. Dieilly, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A machine for heckling and smoothing flax, hemp, &c."—Dated 1st August, 1861.

50,666. Douat, of 9, Rue Bizet, Paris, for "Cartridge boxes for foot soldiers."—Dated 3rd August, 1861.

50,667. Dubalen, of Eugénie-les-Bains, for "A heating apparatus."—Dated 10th August, 1861.

50,668. Dumas, represented by Guion, of 29, Boulevart St. Martin, Paris, "for "Improvements in conical mills."—Dated 1st August, 1861.

50,669. Estève, of 18, Rue Pierre-Levée, Paris, for "A diaphason for orchestras."—Dated 3rd August, 1861.

50,670. Flanders, represented by Mathieu, Paris, for "Improvements in machines for cutting and splitting leather."—Dated 31st July, 1861.

50,671. Gillard and Henrichs, of 15, Rue de la Victoire, Paris, for "Mixed toy guns or pistols."—Dated 31st July, 1861.

50,672. Giraud and Turcotti, of 43, Rue de Laborde, and 22, Rue de Borghese, Parc de Neuilly, Paris, for "An apparatus for drawing water from wells and other places, being applicable to watering gardens, &c."—Dated 31st July, 1861.

50,673. Guérin, Brothers, of Quartier de la Capelette, Marseille, for "Metal thread coated with horse hair and goats hair."—Dated 9th August, 1861.

50,674. Guilbert, of Eth, for "An apparatus for boiling animal black."—Dated 13th August, 1861.

50,675. Howe, represented by Tolhausen, of 35, Boulevart Bonne-Nouvelle, Paris, for "A machine for blanching or cleaning rice, coffee, &c."—Dated 2nd August, 1861.

50,676. Tollivet, of 66, Rue St. André-des-Arts, Paris, for "Legs of half boots."—Dated 1st August, 1861.

50,677. Laplatte, of 27, Rue des Fossés Montmartre, Paris, for "A kind of umbrellas, parasols, &c."—Dated 1st August, 1861.

50,678. Pitts, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "Improvements in billiard tables."—Dated 30th July, 1861.—(English Patent, 13th December, 1860.)

50,679. Poulin, of 25, Rue Popincourt, Paris, for "Manufacture of heads and limbs of statuettes and dolls that cannot break."—Dated 3rd August, 1861.

50,680. Prangley, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in the construction of pianos."—Dated 2nd August, 1861.—(English Patent, 2nd February, 1861.)

50,681. Pronnier, of 22, Rue Chaptal, Paris, for "An economical journal."—Dated 31st July, 1861.

50,682. Pujol and Company, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "Improvements in Acklin's process for the substitution of paper for pasteboard on Jacquart looms, and reading machine for holding the paper."—Dated 1st August, 1861.

50,683. Taiian, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "A kind of staircase with moveable and elastic steps."—Dated 3rd August, 1861.

50,684. Tawell, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "Improvements in the borders of lace and other tissues."—Dated 1st August, 1861.—(English Patent, 16th July, 1861.)

50,685. Thirion, represented by Barrault, of 33, Boulevart St. Martin, Paris, for "A vehicle."—Dated 30th July, 1861.

50,686. Topham, Brothers, of 34, Rue Bergère, Paris, for "Manufacture of imitation lace."—Dated 3rd July, 1861.

50,687. Weyersburgh and Company, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A petticoat with a moveable tournure."—Dated 30th July, 1861.

50,688. Wilson and Rowlett, represented by Ansart, of 33, Boulevart Saint Martin, Paris, for "Improvements in machines for sewing, embroidering, making button holes, &c."—Dated 5th August 1861.—(English Patent, 2nd February, 1861.)

50,689. Allemand and Petit, of Auxerre, for "Bottoms of casks that can be removed without taking off the hoops."—Dated 17th August, 1861.

50,690. Beaudouien, of Nogent-l'Abbesse, for "A moveable press."—Dated 14th August, 1861.

50,691. Bérenger, of 100, Rue de la Barrière, Elbeuf, for "A system of warping."—Dated 14th August, 1861.

50,692. Bertrand, of Saint-Pierre-les-Calais, for "Applying the bobbin system to the manufacture of bishop network or bobbin imitation on weavers' looms."—Dated 7th August, 1861.

50,693. Bétés, 15, Rue Saint Rémi, Bordeaux, for "A folding system called 'Packet boxes.'"—Dated 14th August, 1861.

50,694. Blanc, of Périgueux, for "Raw sausage with truffles."—Dated 12th August, 1861.

50,695. Bosler-Richot, of Rethel, for "Heating."—Dated 7th August, 1861.

50,696. Burnier, of 19, Rue Royale, Lyon, for "A stuff called 'Foulard bobbinet.'"—Dated 12th August, 1861.

50,697. Catenot, of 39, Cours Morand, Lyon, for "A balance."—Dated 13th August, 1861.

50,698. Chadeyron and Castet, of 55, Rue du Loup, and 6, Rue des Trois Canards, Bordeaux, for "A furnace worked by compressed gas with a purifying gas meter."—Dated 14th August, 1861.

54,699. Delbosc, of 54, Allée Louis Napoleon, Toulouse, for "A horse-gin with a double motor and thrashing machine belonging thereto."—Dated 14th August, 1861.

50,700. Fauré, of Romans, for "A process for shearing and printing skins with hair of all colours for carpets and furniture."—Dated 8th August, 1861.

50,701. Fenouillet, of Bully, for "A kind of wick for smoking casks for wine and other liquids with brimstone."—Dated 14th August, 1861.

50,702. Floire, of 52, Rue des Ayres, Bordeaux, for "A system of preventing railway accidents."—Dated 19th August, 1861.

50,703. Frick, of 104, Rue de Rome, Marseille, for "A French kneading machine."—Dated 12th August, 1861.

50,704. Guigonnet, of La-Tour-de-Salvagny, for "A so-called 'imperial illuminating lamp.'"—Dated 14th August, 1861.

50,705. Hebbard, of Chabeuil, for "A liquid for preventing the disease of silk-worms."—Dated 29th July, 1861.

50,706. Ladreyt, of Montélimart, for "A machine for the extraction of soft stone."—Dated 5th August, 1861.

50,707. Laudet, of 18, Impasse du Maine, Paris, for "Applying steam to cutting paving stones."—Dated 3rd August, 1861.

50,708. Madiou, of Rue de la Verrerie, Nantes, for "A mechanism for Venetian blinds and window blinds."—Dated 17th August, 1861.

50,709. Mallet, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "Cooling alimentary paste made of barley, rye, or oatmeal."—Dated 3rd August, 1861.

50,710. Merlateau, of Castillonnès, for "A stove for cooking plums."—Dated 14th August, 1861.

50,711. Neuvy-Brethon, of 13, Rue du Gazomètre, for "A vehicle for distributing manure on the soil."—Dated 10th August, 1861.

50,712. Piccard, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in probes."—Dated 30th July, 1861.

50,713. Priqueler and Loiseau, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machines far the manufacture of screws."—Dated 3rd August, 1861.

50,714. Pulvé, of Vacherauville, for "A fireproof trunk."—Dated 17th August, 1861.

50,715. Rémond, of Péronne, for "Elastic trusses."—Dated 14th August, 1861.

50,716. Rousseau, represented by Ricordeau, of 23, Boulevard de Strasbourg, Paris, for "Tops with chimes."—Dated 3rd August, 1861.

50,717. Sainte-Pierre, of 42, Rue de la Goutte-d'Or, and Villa Poissonniere, Paris, for "A machine for washing, stoppering, &c., bottles."—Dated 25th June, 1861.

50,718. Spencer and Cheney, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in breech-loading fire-arms."—Dated 1st August, 1861.

50,719. Strauss, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "An album with alternating cards and a repertory."—Dated 3rd August, 1861.

50,720. Tachett, Bughon, and Christmann, of Clermont, for "A steam-engine."—Dated 10th August, 1861.

50,721. Alexandre, of 21, Rue du Faubourg-du-Temple, Paris, for "A steam-motor."—Dated 6th August, 1861.

50,722. Badin, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Substituting animal mountings for canes in seats, benches, &c."—Dated 7th August, 1861.

50,723. Bailly, of Longchanmois, for "Manufacture of spectacles in two pieces without soldering, of iron, cast steel, and copper, and system of bronzing and gilding."—Dated 16th August, 1861.

50,724. Bartholf, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in boot-jacks."—Dated 6th August, 1861.

50,725. Boch, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "Manufacture of coloured flagstones and paving-tiles."—Dated 7th August, 1861.

50,726. Bouquié, of 43, Rue St. Georges, Paris, for "A break-boat applicable to towing."—Dated 5th August, 1861.

50,727. Calvet, of 3, Rue St. Thomas d'Enfer, Paris, for "Application of carmine."—Dated 6th August, 1861.

50,728. Cécile, of 96, Rue de Meaux, Paris, for "A windlass."—Dated 5th August, 1861.

50,729. Deligny, represented by Branson, of 13, Rue Gaillon, Paris, for "Improvements in stays."—Dated 7th August, 1861.

50,730. Diette and Forin, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A rack-balance for clocks, pictures, &c."—Dated 5th August, 1861.

50,731. Drevelle, represented by Brandon, of 13, Rue Gaillon, Paris, for "Improvements in machines and apparatus for folding and measuring tissues, papers, and other products, and for inserting cards into the folds about to be pressed."—Dated 7th August, 1861.—(English Patent, 6th February, 1861.)

50,732. Ducos, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "A so-called 'Napoleon universal copying-press.'"—Dated 6th August, 1861.

50,733. Dupanloup, represented by Amouroux, of 333, Rue St. Martin, Paris, for "A rest of brooms with castors."—Dated 6th August, 1861.

50,734. Duparcque, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "A deafening apparatus, called antiphone somnophile of railways."—Dated 7th August, 1861.

50,735. Filliette, of 32, Rue du Chemin Vert, Paris, for "Improvements in stamping apparatus."—Dated 6th August, 1861.

50,736. Franey, of 75, Rue des Haies, Paris, for "A safety apparatus for railway travellers."—Dated 6th August, 1861.

50,737. Girard, with Rabuat, of 78, Rue de Lewis, Paris, for "Windows of buildings."—Dated 6th August, 1861.

50,738. Gleize, of 8, Rue des Moineaux, Paris, for "Manufacture of copper kitchen utensils."—Dated 6th August, 1861.

50,739. Guinier, of 12, Rue de la Glacière, Paris, for "Improvements in punches for stamping."—Dated 7th August, 1861.

50,740. Heurtier and Liniére, of 33, Rue Pigalle' Paris, for "An alarum moderator applicable to all gas-burners."—Dated 6th August, 1861.

50,741. Lambrigot, of 150, Rue de Grenelle, St. Germain, Paris, for "A telegraphic apparatus."—Dated 6th August, 1861.

50,742. Lemoine, of 34, Rue St. Paul, Paris, for "Improvements in oil cans."—Dated 6th August, 1861.

50,743. Leplanquais, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in the manufacture of trusses, and in machines for sewing them."—Dated 6th August, 1861.

50,744. Lesueur, of 78, Boulevart des Amandiers, Paris, for "A mode of covering houses and other buildings."—Dated 5th August, 1861.

50,745. Leviau, of 22, Avenue des Ternes, Paris, for "A propelling tube applicable to navigation."—Dated 6th August, 1861.

50,746. Martin-Miller-Sohn, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A process for protecting metallic ropes and wire from rust or oxidation."—Dated 6th August, 1861.

50,747. Moreau, Brothers and Company, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kind of illustrated flannel waistcoat."—Dated 6th August, 1861.

50,748. Olivier, of 54, Rue de Chabrol, Paris, for "Application of a peculiar oil-grease to lubricating machinery."—Dated 6th August, 1861.

50,749. Perrot, of 76, Rue de Sévres, Vaugirard, Paris, for "Improvements in lightning rods."—Dated 7th August, 1861.

50,750. POUTIERRE, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A piston with a moveable elack-valve for hydraulie pumps."—Dated 7th August, 1861.

50,751. STURM, represented by Bonneville, of 39, Rue de l'Eehiquier, Paris, for "A helicoidal motor."—Dated 8th August, 1861.

50,752. WALL, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Metallic pipes and grates for preserving the tubes of tubular boilers, and means of protecting those pipes from eorrosion, said means being applieable to metals in general, to wood, bricks, &c."—Dated 8th August, 1861.—(English Patent, 19th Mareh, 1861.)

50,753. BILLOT, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A kitehen apparatus for beating eggs, eream, butter, &c."—Dated 8th August, 1861.

50,754. BLANC and ETIENNE, of 27, Rue Peyrolières, Toulouse, for "A pump with three pistons in a single barrel fastened in three rods passing into eaeh other."—Dated 22nd August, 1861.

50,755. CABOURG, of 2 and 4, Rue du Four, St. Honoré, Paris, for "Manufacture of foot-eoverings with engraved screws."—Dated 8th August, 1861.

50,756. CÉZARD, of Place Louis 16th, Nantes, for "An hydraulie apparatus for raising liquids in sugar works."—Dated 9th August, 1861.

50,757. CHRÉTIONNOT, represented by Ansart, of 33, Boulevart Saint Martin, Paris, for "A Burgundian plough with a reduced blade."—Dated 7th August, 1861.

50,758. COLLONGUES, of 72, Grand Rue de Passy, Paris, for "An instrument, ealled 'Vital diapason.'"—Dated 7th August, 1861.

50,759. DEPLECHIN, of 14, Rue des Remparts, Havre, for "A gasmeter."—Dated 20th August, 1861.

50,760. DIDIER, VINAY and GAUSSIN, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "An electrieal signal with an indieator for hotels, establishments, &c."—Dated 8th August, 1861.

50,761. DOLLE, of St. Quentin, for "A rotary engine."—Dated 20th August, 1861.

50,762. BREVELLE, represented by Brandon, of 13, Rue Gaillon, Paris, for "Improvements in the manufacture of plain or figured velvet tissues."—Dated 8th August, 1861.—(English Patent, 8th February, 1861.)

50,763. DRIOU, MORET, and Company, represented by Driou, of 23, Rue du Mail, Paris, for "Cutting shirts."—Dated 8th August, 1861.

50,764. FONTAINE, of 7, Rue des Batailles, Paris, for "Faney beer."—Dated 8th August, 1861.

50,765. FONTAINE, of Chartres, for "An helieoidal apparatus for propelling vessels."—Dated 19th August, 1861.

50,766. FOURNET, of 74, Rue du Vieux Chemin de Rome, Marseille, for "An apparatus for filtering water."—Dated 19th August, 1861.

50,767. FRANÇOIS, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "An apparatus for the manufaeture of gaseous liquids."—Dated 8th August, 1861.

50,768. GALTIER, of Nimes, for "A truss."—Dated 19th August, 1861.

50,769. GINIER, GILLET, and MARGAROLI, of 4, Rue des Fantasques, Lyon, for "A maehine ealled 'Chronograph,' applicable to public earriages."—Dated 16th August, 1861.

50,770. GLEIZES, with Chazottier, 19, Rue Grenette, Lyon, for "A proeess for protecting metals from oxidation."—Dated 19th August, 1861.

50,771. LANGWEILER, domiciled with Rambaud, 9, Cours de Brosses, Lyon, for "Manufaeture of forge iron and steel in puddling furnaces."—Dated 19th August, 1861.

50,772. LESOURD, of Canteleu, for "Improvements in apparatus for the manufaeture of lighting gas."—Dated 22nd August, 1861.

50,773. LOUP, of Givors, for "Conglomerating eoal dust by the eombined aetion of pressure and steady direet heat."—Dated 17th August, 1861.

50,774. LUNGLEY, represented by Rieordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in war vessels."—Dated 8th August, 1861.

50,775. MEYER, of Mulhouse, for "A hand mill for grinding eorn."—Dated 17th August, 1861.

50,776. MIGEOT DE BABAN, of 95, Rue de Théâtre, Paris, for "A kind of pineers for the neeks of bottles with gaseous liquids."—Dated 8th August, 1861.

50,777. MOUFFLET, of 61, Rue Ste. Catherine, Orleans, for "Drying and boiling cereals and other vegetables and eoneentrating syrup."—Dated 22nd August, 1861.

50,778. MOUGEOT, of Bar-sur-Aube, for "Chemical produets applicable to perfumery."—Dated 19th August, 1861.

50,779. PROTTE, of Vendeuvre, for "An improved portable horse gin."—Dated 23rd August, 1861.

50,780. SCHLUEB, Ouzelet, St. Louis, for "Jacquart cards."—Dated 21st August, 1861.

50,781. SERRIN, of Claremont, for "A machine for thrashing and winnowing corn by means of a horse gin."—Dated 21st August, 1861.

50,782. TRÉGAN, of Bruniquel, for "A warping and spooling machine."—Dated 17th August, 1861.

50,783. WOOLBRETT, of 38, Quai des Bateliers, Strasbourg, for "A plane with a multiple power."—Dated 21st August, 1861.

50,784. ARMELIN and BÉNARD, represented by Le Blane, of 2, Rue Ste. Appoline, Paris, for "Improvements in the eonstruetion of irrigators with clack-valve fossets."—Dated 10th August, 1861.

50,785. BACOT and Son, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A loom for weaving faney stuffs by means of several shuttles and horizontal boxes."—Dated 10th August, 1861.

50,786. BAUDOUIN and JOUANIN, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in looms for the manufaeture of fishing and other nets."—Dated 9th August, 1861.

50,787. Borame, of 57, Rue de l'Abbaye-Montmartre, Paris, for "Composition of soap extracted from Panama wood, and essence of said wood."—Dated 12th August, 1861.

50,788. Boulanger, of 18, Rue des Moulins, Paris, for "An optical apparatus called 'Polymicrorama.'"—Dated 12th August, 1861.

50,789. Cordier, of 23, Rue des Rigoles, Paris, for "Improvements in the manufacture of ventilators."—Dated 12th August, 1861.

50,790. Deharbes and Arrachart, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kind of motor and its applications."—Dated 10th August, 1861.

50,791. Désnos, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A kind of atmospheric pessary."—Dated 10th August, 1861.

50,792. Drijard, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the manufacture of jewellery, and mounting them."—Dated 10th August, 1861.

50,793. Grisard-Vanzuylen, represented by Bonneville, of 39, Rue de l'Échiquier, Paris, for "A system of grates for all kinds of furnaces."—Dated 10th August, 1861.

50,794. Grognet, of 21, Rue des Bons Enfants, Paris, for "Using compressed air as a motor."—Dated 10th August, 1861.

50,795. Hund, of 31, Rue du Faubourg du Temple, Paris, for "An hygrometer."—Dated 10th August, 1861.

50,796. Jennings, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of capsules or envelopes for the necks or extremities of jars, bottles, and other vases, and also for tubes or hollow bodies."—Dated 9th August, 1861.—(English Patent, 9th February, 1861.)

50,797. Jullion, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the treatment of the residue of soda and sulphurets."—Dated 10th August, 1861.—(English Patent, 9th February, 1861.)

50,798. Lory, of 12, Rue de la Tour, Paris, for "A magical table."—Dated 12th August, 1861.

50,799. Maguin, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in sewing and embroidering machines."—Dated 10th August, 1861.

50,800. Martin, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A machine for rolling iron in a transversal direction."—Dated 12th August, 1861.

50,801. Miller and Son, represented by Courrouve, of 28, Rue Feydeau, Paris, for "Improvements in apparatus for governing or ruling the speed of steam and other engines."—Dated 12th August, 1861.—(English Patent, 21st February, 1861.)

50,802. Monsch, represented by Bresson, of 51, Rue de Malta, Paris, for "A smoking pipe with an absorbing chamber."—Dated 10th August, 1861.

50,803. Nicolas and Co., represented by Guion, of 29, Boulevart St. Martin, Paris, for "A pump."—Dated 9th August, 1861.

50,804. Pieffort, of 18, Rue de Verdôme, Paris, for "A kind of stays."—Dated 10th August, 1861.

50,805. Piver, of 10, Boulevart de Strasbourg, Paris, for "A machine for raising water, &c."—Dated 12th August, 1861.

50,806. Pluchart, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "So-called 'Moka beer.'"—Dated 10th August, 1861.

50,807. Pulvermacher, of 18, Rue Favart, Paris, for "Improvements in electrical batteries with a single liquid."—Dated 9th August, 1861.

50,808. Rainey, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in back-folding chairs for railways, cabins of vessels, &c."—Dated 10th August, 1861.

50,809. Raveneau, of 96, Rue du Faubourg Poissonnière, Paris, for "A widening mouth-piece of water pipes."—Dated 12th August, 1861.

50,810. Richards, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Combined knives, forks, and spoons."—Dated 9th August, 1861.—(American Patent.)

50,811. Roulliet, of 12, Rue Lafayette, Paris, for "A so-called 'Amaranth' process for reproducing any number of designs made by the artist himself."—Dated 12th August, 1861.

50,812. Senez, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "An apparatus for cleaning all kinds of grates."—Dated 8th August, 1861.

50,813. Serret-Hamoir, Duquesne, and Company, represented by Lesens, of Valenciennes, for "Obtaining fodder in ditilling corn by means of acids."—Dated 10th August, 1861.

50,814. Tournier, of 140, Rue de Charenton, Paris, for "A kind of wheel tyres."—Dated 10th August, 1861.

50,815. Vuillequey, of 132, Rue de Ménilmontant, Paris, for "A division portemonnaie."—Dated 8th August, 1861.

50,816. Wall, represented by Ansart, of 33, Boulevart Saint Martin, Paris, for "An apparatus applicable to fireplaces of locomotives and other steam generators, for the purpose of consuming the gas generated by coal and other fuel, and for economizing said fuel."—Dated 9th August, 1861.

50,817. Baudou-Porchez and Sons, of Lille, for "A small economical stove for workmen."—Dated 27th August, 1861.

50,818. Blondel, of Saint-Nizier-sous-Charlieu, for "A metallic hot-air stove for baking bread and all kinds of food."—Dated 26th August, 1861.

50,819. Bruel, of 8, Place de l'Impératrice, Lyon, for "Interior of chimneys of grooved cast iron."—Dated 21st August, 1861.

50,820. Chauvin and Billard, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A kind of salt box, pepper box, and sugar basin."—Dated 12th August, 1861.

50,821. The De Floreffe Company, represented by Despret, domiciled with Dehaye Jeumont, for

"Improvements in the manufacture of sulphuric acid."—Dated 26th August, 1861.

50,822. Damoiseau, represented by Brade, of 29, Rue Ste. Anne, Paris, for "An apparatus for drawing blood and other liquids from the body of man or animals."—Dated 12th August, 1861.

50,823. Donvez, of 8, Rue du Boudinet, Valenciennes, for "A moderator jet d'eau."—Dated 28th August, 1861.

FOREIGN and COLONIAL PATENT LAWS and RULES, being translations or copies of Official Communications, may be found in the following Numbers of this Journal, published at each, or 3*d*. free by post:—

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No. 842. TUESDAY, JANUARY 28, 1862. Price 2d.

Applications for Letters Patent.

(*24th, 25th, and 27th January*, 1862.)

181. ALEXANDER WILLIAM WILLIAMSON, Ph. D., F.R.S., University College, London, for an invention of "Improvements in tubulous boilers or steam generators."—Dated 24th January, 1862.

182. JAMES HIGGIN, of the city of Manchester, Cotton Merchant, for an invention of "Improvements in machinery for retarding and stopping railway carriages."—Dated 24th January, 1862.

183. JOHN CORNFORTH, of Birmingham, in the county of Warwick, Manufacturer, and BENJAMIN SMITH, of Birmingham aforesaid, Machinist, for an invention of "New or improved machinery for boring or drilling gun-barrels and tubes and other articles having a cylindrical or prismatic figure, which said machinery may also be applied to other like purposes."—Dated 24th January, 1862.

184. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the manufacture of artificial flowers, leaves, and fruit."—A communication to him from abroad by Joseph Dominique Alphonse Favier, of 29, Boulevart St. Martin, Paris, Artificial Flower Maker.—Dated 24th January, 1862.

185. JOHN LONGHURST, of Ticehurst, in the county of Sussex, Gentleman, for an invention of "Improvements in chains and chain cables."—Dated 24th January, 1862.

186. JAMES ROCK the younger, of Hastings, in the county of Sussex, Carriage builder, for an invention of "Improvements in common road carriages."—Dated 24th January, 1862.

187. JOHN WARD GIRDLESTONE, of Birkenhead, in the county of Chester, Gentleman, for an invention of "Improvements in projectiles for fire arms."—Dated 24th January, 1862.

188. TIMOTHY MORRIS and ROBERT WEARE, both of Birmingham, in the county of Warwick, Electricians, and EDWARD HENRY CRADOCK MONCKTON, of Fineshade, in the county of Northampton, Esquire, for an invention of "Improvements in submarine and other telegraphic communication, and in apparatus connected therewith."—Dated 24th January, 1862.

189. CHARLES GODFREY HALL, of Regent Street, in the county of Middlesex, for an invention of "Improvements in the manufacture of boots, shoes, and leggings."—Dated 24th January, 1862.

190. ARTHUR WALLIS and CHARLES HASLAM, of Basingstoke, in the county of Southampton, Engineers and Ironfounders, for an invention of "Improvements in thrashing machines."—Dated 24th January, 1862.

191. JOHN ALISON, of Brightland, Reigate, in the county of Surrey, for an invention of "Improvements in apparatus for tilling land by steam power."—Dated 24th January, 1862.

192. WHITMORE BAKER, of Downham, in the county of Norfolk, Surgeon Dentist, for an invention of "Improvements in fire arms."—Dated 25th January, 1862.

193. WILLIAM JOHNSTON, of Glasgow, in the county of Lanark, North Britain, Metal Merchant, for an invention of "Improvements in lamps."—Dated 25th January, 1862.

194. CHARLES WEST, of 2, Derby Street, Westminster, London, and of Chateau Lehocq, Boulogne-sur-Mer, France, for an invention of "Improvements in the insulating and covering wire, and in the preparation of the materials for insulating."—Dated 25th January, 1862.

195. JEAN CLAUDE FRANÇOIS MOUGIN, of Paris, France, for an invention of "Improvements in barcelonnettes or cradles for children or for dolls."—Dated 25th January, 1862.

196. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the prevention or removal of incrustation in or from steam generators, and in the apparatus employed therein."—A communication to him from abroad by Stanislas Michel Lecacheux and Bernard Sartre, both of Marseilles, in the empire of France.—Complete specification.—Dated 25th January, 1862.

197. Dickinson Edleston, of the firm of Holmes and Company, of Halifax, in the county of York, Dyer and Finisher, and Henry Gledhill, of the same place, Finisher, for an invention of "Improvements in means and apparatus for finishing textile and other fabrics."—Dated 25th January, 1862.

198. Edwin Augustus Curley, of 4, Green Terrace, New River Head, Clerkenwell, in the county of Middlesex, Gentleman, for an invention of "Certain improvements in sewing machines."—Dated 25th January, 1862.

199. John Wright, of Rochester, in the county of Kent, Civil Engineer, for an invention of "Improvements in constructing works below water."—Dated 25th January, 1862.

200. François Joseph Lalmand Lefort, of Bothey, in the kingdom of Belgium, for an invention of "Improved mechanical arrangements constituting a secret and invisible safety lock applicable to iron safes and other depositories."—Dated 25th January, 1862.

201. Frederick Roberts, of Maiden Newton, and Alexander Roberts, of Frome Vauchurch, both in the county of Dorset, for an invention of "Improvements in apparatus for ploughing or cultivating land."—Dated 25th January, 1862.

202. John Brown, Manager, and Joseph Davenport, Pattern Maker, both of Bolton, in the county of Lancaster, for an invention of "An improved lubricator for pistons."—Dated 25th January, 1862.

203. Alexander Samuelson, of 28, Cornhill, in the city of London, Engineer and Iron Ship Builder, for an invention of "Improvements in hydraulic presses, and in the mode of working the same."—Dated 25th January, 1862.

204. Walter Smith, of the city of Manchester, Corn Factor, and Casimir Tiesset, of Boulogne-sur-Mer, in the empire of France, Chemist, for an invention of "Improvements in the manufacture of colours for dyeing and printing."—Dated 27th January, 1862.

205. Joseph Lillie, of Duke Street, Adelphi, in the county of Middlesex, Engineer, for an invention of "The application of new materials to the bottoms of sea-going and other vessels for the prevention of fouling."—Dated 27th January, 1862.

206. Samuel Alfred Carpenter, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in covering and combining strips or bands of steel for crinoline or crinoline skirts."—Dated 27th January, 1862.

207. Ralph Martindale, of Handsworth, in the county of Stafford, Gentleman, for an invention of "Improvements in globes and glasses to be used with hydro-carbon lamps."—Dated 27th January, 1862.

208. Charles Weightman Harrison, of Lorimer Road, Walworth, in the county of Surrey, Engineer, for an invention of "Improvements in printing, stamping, embossing, perforating, and other like operations, and in the machinery or apparatus employed therein."—Dated 27th January, 1862.

209. William Orr, of Greenock, in the county of Renfrew, North Britain, Sugar Refiner, for an invention of "Improvements in machinery or apparatus for the manufacture of sugar."—Dated 27th January, 1862.

210. Joseph Smith, of Spring Row, in Keighley, in the county of York, Machinist, for an invention of "Improvements in the construction of covered rollers used in machinery for preparing, roving, spinning, twisting, and doubling fibrous materials."—Dated 27th January, 1862.

211. William White Warren, Gentleman, of No. 82, Parrock Street, in the parish of Milton, Gravesend, Kent, for an invention of "The purpose of preventing the desecration of the dead for sanitary purposes, and providing a cheap and inexpensive mode of interment."—Dated 27th January, 1862.

212. Thomas John Robotham, of Burslem, Chemist, and Nathan Hackney, of Hanley, Agent, both in the county of Stafford, for an invention of "Improvements in purifying slip, glaze, and other potters' materials."—Dated 27th January, 1862.

Notices to Proceed.

Notice is hereby given, that

2298. Timothy Morris, Robert Weare, and Edward Henry Cradock Monckton, all of 4, Trafalgar Square (Patent Office), in the county of Middlesex, have given notice at the Office of the Commissioners of their intention to proceed with their application for Letters Patent for the invention of "Improvements in batteries for obtaining electric currents and the products therefrom."

As set forth in their petition, recorded in the said office on the 14th day of September, 1861.

2303. And John Reeves, of the city of New York, in the United States of America, now residing in London, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in electric-magnetic engines for obtaining and applying motive power."

2312. And Frederic Maitland Ransome and Ernest Leslie Ransome, both of Ipswich, in the county of Suffolk, have given the like notice in respect of the invention of "Improvements in

treating stone, bricks, and other surfaces, and in the manufacture of filters."

As set forth in their respective petitions, both recorded in the said office on the 16th day of September, 1861.

2315. And FRANCIS WRIGLEY, of the city of Manchester, in the county of Lancaster, Consulting Engineer, has given the like notice in respect of the invention of "Improvements in the construction, manufacture, and mode of securing armour for the protection of ships and fortifications against projectiles."

2317. And JOHN EASTWOOD, of Bradford, in the county of York, Machine Wool Comber, and JOHN BARNETT JOYCE, of Bradford aforesaid, Machine Maker, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for combing wool and other fibrous substances."

As set forth in their respective petitions, both recorded in the said office on the 17th day of September, 1861.

2324. And JOSEPH GIRTON BRIGGS, of No. 23. Earl Street, Blackfriars, in the city of London, has given the like notice in respect of the invention of "An improved method of making fireproof buildings, ships, and other constructions."

2331. And EDMUND SUCKOW and EDWARD HABEL, of the city of Manchester, in the county of Lancaster, Engineers, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for opening and cleaning cotton and other fibrous materials."

As set forth in their respective petitions, both recorded in the said office on the 18th day of September, 1861.

2333. And LOUIS GABRIEL AUGUSTE CONDROY, of the town of Douai, in the empire of France, Machine Builder, has given the like notice in respect of the invention of "An improved centrifugal apparatus intended for purifying, washing, drying, moulding, or extracting from liquids, substances, or materials of various kinds, which are deposited or poured for this purpose in moveable baskets or boxes fitted in the said apparatus."

2340. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in machinery for the manufacture of fishing and other nets."—A communication to him from abroad by Messrs. Felix Marie Baudouin and Achille Baudouin, Civil Engineers, and Jean Baptiste François Jouannin, Mechanician, all of 29, Boulevart St. Martin, Paris.

2348. And THEOPHILUS REDWOOD, of 19, Montague Street, Russell Square, in the county of Middlesex, has given the like notice in respect of the invention of "An improvement in the manufacture of paper."

As set forth in their respective petitions, all recorded in the said office on the 19th day of September, 1861.

2353. And JOSEPH CHRISTIAN DAVIDSON, of Yalding, in the county of Kent, Farmer, has given the like notice in respect of the invention of "Improvements in thrashing machines."

2359. And FRANCIS WILLIAM WYMER, Engineer, of 7, St. Ann's Row, Newcastle-on-Tyne, has given the like notice in respect of the invention of "Improvements in apparatus used in sounding the holds of ships or vessels."

As set forth in their respective petitions, both recorded in the said office on the 20th day of September, 1861.

2362. And CHARLES BOARD, of the city of Bristol, Cabinet Maker, has given the like notice in respect of the invention of "Improvements in veneering presses."

2363. And HENRY COCKEY and FRANCIS CHRISTOPHER COCKER, of the Frome Iron Foundry, in the county of Somerset, Engineers, have given the like notice in respect of the invention of "Improvements in apparatus employed in the manufacture of gas."

2364. And JAMES FENTON, of Low Moor, in the county of York, Civil Engineer, has given the like notice in respect of the invention of "An improved method of causing the water to circulate in steam boilers."

2365. And WILLIAM STABLEFORD, of Oldbury, in the county of Worcester, Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of wheels and in securing tyres on or to wheels."

As set forth in their respective petitions, all recorded in the said office on the 21st day of September, 1861.

2371. And HIPPOLYTE PLANTROU, junior, of No. 15, Passage des Petites Ecuries, Paris, in the empire of France, Dyer, has given the like notice in respect of the invention of "Improvements in washing and scouring wools by the introduction of air into the water, using an aëriform washing apparatus."

2375. And ALFRED AUGUSTUS HELY, of Forest Hill, in the county of Surrey, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the construction of portable fire-arms."

As set forth in their respective petitions, both recorded in the said office on the 23rd day of September, 1861.

2382. And THOMAS DAVEY, of Tucking Mill, Camborne, in the county of Cornwall, Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of safety fuses, parts of which are applicable to the manufacture of pipes and tubes of lead and other soft metal, gutta percha, caoutchouc, bitumen, and earthenware."

2384. And JAMES FAWCETT, of Wakefield, in the county of York, Corn and Fulling Miller, has given the like notice in respect of the invention of "An improved material, particularly adapted for the scouring, cleansing, and fulling of woollen or other cloths."

As set forth in their respective petitions, both recorded in the said office on the 24th day of September, 1861.

2387. And JAMES BANKS, of No. 19, Salisbury Street, Adelphi, Electric Engineer, has given the like notice in respect of the invention of "Improvements in electro-magnetic telegraph printing

apparatus or marking instruments, and the instruments or apparatus to be used in connection therewith."

2390. And THOMAS BRIGHT, of Rochdale, in the county of Lancaster, Carpet Manufacturer, and ROBERT MILLS, of the same place, Engineer, have given the like notice in respect of the invention of "Improvements in apparatus or means employed in the printing of yarns for carpets and other fabrics."

2392. And RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatuses for letting off water from and for admitting oil or other lubricating matter into steam cylinders."—A communication to him from abroad by Isidore Duballe, of Paris, France.

2398. And GODFREY RUSSELL, of Swan Hill, Shrewsbury, in the county of Salop, has given the like notice in respect of the invention of "Spring stretchers or bedsteads for camp hospitals or general use."

As set forth in their respective petitions, all recorded in the said office on the 25th day of September, 1861.

2402. And JAMES OPENSHAW, Manufacturer, WILLIAM ENTWISTLE, Manager, and JAMES LORD, Mechanic, all of Bury, in the county of Lancaster, have given the like notice in respect of the invention of "Certain improvements in mules for spinning cotton and other fibrous substances."

As set forth in their petition, recorded in the said office on the 26th day of September, 1861.

2416. And JAMES KIMBERLEY, of Birmingham, in the county of Warwick, Wholesale Ironmonger and Manufacturer, has given the like notice in respect of the invention of "A new or improved machine for morticing, tenoning, sawing, boring, drilling, and grooving wood."

2417. And DUNCAN MCCALLUM, of Greenock, in the county of Renfrew, North Britain, Engineer, has given the like notice in respect of the invention of "Improved arrangements for filling and closing bottles and other vessels."

As set forth in their respective petitions, both recorded in the said office on the 27th day of September, 1861.

2426. And DENNY LANE, of the county of the city of Cork, Secretary of the Cork Gas Consumers' Company, has given the like notice in respect of the invention of "Improvements in apparatus, whereby to regulate the passage or flow of gas, water, and other fluids."

As set forth in his petition, recorded in the said office on the 28th day of September, 1861.

2431. And THOMAS SMITH, of Aberdeen Street, Sheffield, Optician, has given the like notice in respect of the invention of "Improvements in the construction of umbrellas, adapted to purposes of self-defence, some of which improvements are also applicable to other purposes."

2440. And FREDERICK WALTON and RICHARD BEARD, junior, both of the British Grove Works, Chiswick, in the county of Middlesex, have given the like notice in respect of the invention of "Improvements in the manufacture of varnishes, applicable to the waterproofing and coating of fabrics and other uses."

As set forth in their respective petitions, both recorded in the said office on the 30th day of September, 1861.

2444. And OSCAR OCTAVE LESOURD, of Paris, in the French empire, but temporarily residing at Panton Street, in the county of Middlesex, Barrister, has given the like notice in respect of the invention of "Improvements in joining pipes and tubes, or in forming or securing the joints thereof."—A communication to him from abroad by Jules Lemoine, of 34, Rue Saint Paul, Paris, France.

As set forth in his petition, recorded in the said office on the 1st day of October, 1861.

2495. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "An improved gas regulator and purifier."—A communication to him from abroad by Messrs. Jean Baptiste François Maliquet Allegret, Proprietor, and Lucien Victor Teste, Architect, both of 18, Rue Ferrandière, Lyons, and of 29, Boulevart St. Martin, Paris, both in the empire of France.

As set forth in his petition, recorded in the said office on the 5th day of October, 1861.

2511. And SAMUEL BREMNER, of the Belle Sauvage Works, Ludgate Hill, in the city of London, Printer and Engineer, has given the like notice in respect of the invention of "Improvements in the construction of printing machines, and in driving or actuating the same."

As set forth in his petition, recorded in the said office on the 8th day of October, 1861.

2536. And WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "An improved apparatus for heating the feed water of steam engines."—A communication to him from abroad by Francis Bowes Stevens, of Weehawken, New Jersey, United States of America.

As set forth in his petition, recorded in the said office on the 10th day of October, 1861.

2542. And THOMAS BUTTERWORTH COLLINGWOOD, Manager, and ABRAHAM BUTTERWORH, Overlooker, both of Rochdale, in the county of Lancaster, have given the like notice in respect of the invention of "Improvements in throstle and doubling frames for spinning and doubling fibrous materials."

2543. And WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the condensers and condensing apparatus of steam engines."—A communication to him from abroad by Francis Bowes Stevens, of Weehawken, New Jersey, United States of America.

As set forth in their respective petitions, recorded in the said office on the 11th day of October, 1861.

2569. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the condensers and condensing apparatus of steam engines." — A communication to him from abroad by Francis Bowes Stevens, of Weehawken, New Jersey, in the United States of America.

As set forth in his petition, recorded in the said office on the 15th day of October, 1861.

2638. And Frederick Oldfield Ward, of No. 6, Hertford Street, Mayfair, London, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in hydraulic presses, and in the machinery and apparatus appertaining thereto, and requisite in working the same, part of such improvements relating to the pumping machinery attached to hydraulic presses, and this part being applicable to pumping machinery employed for other purposes."

As set forth in his petition, recorded in the said office on the 22nd day of October, 1861.

2696. And Bartolomeo Predavalle, of 143, Fleet Street, in the city of London, Civil Engineer, has given the like notice in respect of the invention of "A new mode of and apparatus for producing and obtaining an hydro-pneumatic motive-power."

As set forth in his petition, recorded in the said office on the 28th day of October, 1861.

2912. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for cutting irregular and curvilinear forms in wood or other similar substances."—A communication to him from abroad by Robert Marcher, of New York, in the United States of America, Manufacturer of Prepared Mouldings and Oval Frames.

As set forth in his petition, recorded in the said office on the 20th day of November, 1861.

2959. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for preparing oval picture frames."—A communication to him from abroad by Robert Marcher, of New York, in the United States of America, Manufacturer of Prepared Mouldings and Oval Frames.

As set forth in his petition, recorded in the said office on the 25th day of November, 1861.

2965. And Augustus William Willis, of 28, Great Russell Street, Bloomsbury, in the county of Middlesex, Pencil Manufacturer, has given the like notice in respect of the invention of "Improvements in the construction of pencil cases or holders."

As set forth in his petition, recorded in the said office on the 29th day of November, 1861.

3012. And Robert Crawford Perry, of Manchester, in the county of Lancaster, Engraver, has given the like notice in respect of the invention of "An improved infant's feeding bottle."

As set forth in his petition, recorded in the said office on the 29th day of November, 1861.

3096. And Thomas Higgins, of Bow, in the county of Middlesex, Tornographer, has given the like notice in respect of the invention of "Improved machinery for filling dipping clamps with tapers, match stems, and splints."

As set forth in his petition, recorded in the said office on the 10th day of December, 1861.

3114. And William Wiggins Godfrey, of 52, Whiskin Street, Clerkenwell, in the county of Middlesex, Gold Chain Manufacturer, and Goldsmith, has given the like notice in respect of the invention of "An improved fastener or protector for Albert guards."

As set forth in his petition, recorded in the said office on the 12th day of December, 1861.

3172. And Morris Hanff, of Tottenham Street, Tottenham Court Road, in the county of Middlesex, Fancy Box Maker, has given the like notice in respect of the invention of "Improvements in the manufacture of boxes and cases."

As set forth in his petition, recorded in the said office on the 18th day of December, 1861.

3188. And John Smith the younger, of Coven, in the county of Stafford, Engineer and Machinist, and John Birch Higgs, of Covan aforesaid, Engineer and Machinist, have given the like notice in respect of the invention of "Improvements in thrashing machines, and in mills for grinding, and in apparatus for raising or moving grain in granaries and other places."

As set forth in their petition, recorded in the said office on the 20th day of December, 1861.

3259. And Alexander Isaac Austen, of Millwall in the county of Middlesex, Candle manfacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of night lights."

As set forth in his petition, recorded in the said office on the 30th day of December, 1861.

3275. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in revivifying animal black or charcoal, in collecting ammoniacal gases generated in the revivification, in the clarification of saccharine liquors, and in apparatus employed in the revivification of the black, and in the filtering of saccharine liquors." — A communication to him from abroad by Absalon Hippolyte Leplay and Jules François Joseph Cuisinier, both of Paris, France.

As set forth in his petition, recorded in the said office on the 31st day of December, 1861.

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51. And Anthony Heath, of No. 12, Union Square, Islington, in the county of Middlesex, has given the like notice in respect of the in-

vention of "Improvements in the construction of inkstands."

As set forth in his petition, recorded in the said office on the 8th day of January, 1862.

60. And JAMES SMITH and STEPHEN WELLSTOOD, of Glasgow, in the county of Lanark, North Britain, Stove and Range Manufacturers, have given the like notice in respect of the invention of "Improvements in cooking stoves or ranges."

As set forth in their petition, recorded in the said office on the 9th day of January, 1862.

80. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for generating and applying steam as a motive power." — A communication to him from abroad by Mr. Louis Arnier, of 29, Boulevart St. Martin, Paris, in the empire of France, Mechanician.

As set forth in his petition, recorded in the said office on the 10th day of January, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

LIST of LETTERS PATENT which passed the Great Seal on the

28th January, 1862.

1912. HENRY SHAW, of 40, Lower Ormond Quay, Dublin, Printer, for an invention of "Improvements in wet gas meters."—Dated 1st August, 1861.

1919. ROBERT BENTON, of No. 5, Great College Street, Westminster, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in machinery or apparatus for obtaining rotary motion by the use of the gravitating power of solid or fluid matter."—Dated 2nd August, 1861.

1926. JANE CROSS, of the city of Manchester, in the county of Lancaster, for an invention of "Improvements in fastenings for wearing apparel, and in the application thereof."—Dated 3rd August, 1861.

1929. GUSTAVE LOUIS MARIE VISCOUNT DE PONTON D'AMÉCOURT, of Paris, France, for an invention of "Improvements in apparatus connected with aerostation."—Dated 3rd August, 1861.

1933. JOSIAH VAVASSEUR, of 28, Gravel Lane, Southwark, in the county of Surrey, Engineer, for an invention of "A new or improved transportable machine or apparatus for rifling cannon."—Dated 3rd August, 1861.

1939. HERMANN CHRISTIAN MEYER, of Hoxton, in the county of Middlesex, Engineer, for an invention of "Improvements in slide valves to regulate or stop the flow of water, steam, or other fluid."—Dated 5th August, 1861.

1941. EDWARD DANIEL JOHNSON, of Wilmington Square, in the county of Middlesex, Watch and Chronometer Manufacturer, for an invention of "An improvement in the construction of centre seconds watches."—Dated 5th August, 1861.

1962. NICOLAS ANTOINE LESUEUR, of Paris, Boulevart des Amandiers, No. 78, (empire of France), Crockery-ware Manufacturer, for an invention of "A new system of covering for houses, and other buildings and coverings."—Dated 7th August, 1861.

1969. NICHOLAS DORAN PROBY MAILLARD, of Dublin, in the kingdom of Ireland, for an invention of "Improvements in self-acting and inexhaustible hydraulic and atmospheric motive-power engines."—Dated 8th August, 1861.

1973. WILLIAM STRATFORD HOGG, of Rotherhithe Wall, Rotherhithe, in the county of Surrey, for an invention of "Improvements in the construction of doors, gates, and shutters, principally applicable for fire-proof buildings."—Dated 8th August, 1861.

1975. GEORGE HINTON BOVILL, of Durnsford Lodge, Wimbledon, in the county of Surrey, for an invention of "Improvements in ships of war and other vessels, and in the manufacture of armour and other plates of wrought iron."—Dated 8th August, 1861.

1979. HENRY KINSEY, of the Robin Hood Works, Nottingham, for an invention of "Improvements in steam engines and boilers."—Dated 8th August, 1861.

1983. JAMES HEMINGWAY, of Robert Town, in the county of York, Artist, for an invention of "Improvements in machinery or apparatus for working coal, ironstone, or other minerals." — Dated 9th August, 1861.

2001. ANTOINE GARZEND, of 29, Boulevart St. Martin, Paris, Gentleman, for an invention of "A new or improved apparatus for cutting up and reducing dye and other wood."—Dated 12th August, 1861.

2002. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "Improved breaking apparatus for railway and other vehicles."—A communication to him from abroad by Alfred Tabuteau, of Bordeaux, Gironde, France, Engineer.—Dated 12th August, 1861.

2039. JAMES COMBE, of Belfast, for an invention of "Improvements in machinery for hackling flax and other fibrous substances."—Dated 15th August, 1861.

2076. GEORGE FREDERICK MUNTZ, of French Walls, Birmingham, for an invention of "Improvements in sheathing iron ships or vessels."—Dated 20th August, 1861.

2180. WILLIAM FOX, residing at Amiens, France, Manufacturer, for an invention of "Improvements in parasols and umbrellas."—A communication to

him from abroad by Mr. Gabriel Emile Charageat, residing in Paris, 19, Boulevard des Italiens.—Dated 31st August, 1861.

2941. Stephen Sansum, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in penholders."—Dated 23rd November, 1861.

2953. John Macintosh, of North Bank, Regent's Park, in the county of Middlesex, for an invention of "Improvements in obtaining and applying motive, steam, and liquid power, and in apparatus connected therewith."—Dated 25th November, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 25th January*, 1862, *inclusive.*)

23rd January.

216. John Fowler, junior, of Cornhill, Robert Burton, of Kingsland, in the county of Middlesex, David Greig, of New Cross, in the county of Kent, and Jeremiah Head, of Newcastle-on-Tyne, for an invention of "Improvements in agricultural implements and in apparatus used for hauling agricultural implements by steam power."—Dated 24th January, 1859.

238. David Graham, of the firm of Graham, West, and Company, of Wapping, in the county of Middlesex, Millwrights and Engineers, for an invention of "An improved method of driving centrifugal machines."—A communication from T. Hanning, residing in the Mauritius.—Dated 26th January, 1859.

242. James Kerr, of 17, Bedford Terrace, Trinity Square, Southwark, in the county of Surrey, Engineer, for an invention of "Improvements in the construction of revolving fire-arms."—Dated 26th January, 1859.

262. Henry Watson, of High Bridge Works, Newcastle-upon-Tyne, for an invention of "Improvements in the manufacture of knotter plates used in the manufacture of paper."—Dated 28th January, 1859.

24th January.

222. Henry Owen, of Portswood, Southampton, in the county of Hampshire, for an invention of "Improvements in stockings."—Dated 24th January, 1859.

236. Isaac Hammond, of the city of Winchester, in the county of Hants, Gun Maker, for an invention of "Improvements in breech-loading fire-arms and in cartridges to be used therewith."—Dated 26th January, 1859.

25th January.

266. James MacKenzie, Manager to William Strode, of Saint Martin's le Grand, in the city of London, Gas Engineer, for an invention of "An improved method of operating ventilating valves, especially applicable to ventilating gas burners."—Dated 29th January, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 25th January*, 1862, *inclusive.*)

23rd January.

181. Charles William Tupper, of the firm of Messrs. Tupper and Carr, of 3, Mansion House Place, in the city of London, Galvanized Iron Manufacturer, for an invention of "Improvements in the construction and arrangement of coverings for buildings."—Dated 24th January, 1855.

25th January.

236. George Price, of Wolverhampton, in the county of Stafford, Manufacturer, for an invention of "Improvements in iron safes, chests and boxes."—Dated 31st January, 1855.

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B. WOODCROFT,
Superintendent of Specifications, &c.

A List of the Letters Patent for Inventions which have become Void by reason of the Nonpayment of the additional Stamp Duty of £50 before the expiration of the Third Year from the date of such Patents, pursuant to the Act of the 16th Vict. c. 5, sec. 2,—for the Quarter ending the 31st day of December, 1861.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2185	1st Oct., 1858.	William Blake, of No. 16, Harley Street, in the parish of St. Mary's, Stratford-le-Bow, in the county of Middlesex.	An improved portable fire escape.
2186	,,	James Thomas Peter Newbon and Thomas Smith, both of 63, Fenchurch Street, in the city of London, Naval Architects, and James Brown, of No. 37, Tollit Street, Mile End, in the county of Middlesex, Engineer.	An improved method of lifting and lowering ships' anchors.
2187	,,	Matthaeus Hipp, Technical Inspector of the Swiss Telegraphs, of Berne, in Switzerland.	Improvements in electric telegraphs.
2194	2nd Oct., 1858.	William Brierley, the elder, of Cleckheaton, in the county of York, Machine Maker.	Improvements in looms for weaving carpets and other fabrics.
2196	,,	Bernhard Samuelson, of Banbury, Engineer and Agricultural Implement Manufacturer.	Improvements in the wheels of carts and other carriages to be used on common roads.
2197	,,	Henry George Collins, of Paternoster Row, in the city of London.	Improvements in the production of blocks or surfaces to be used in printing.
2198	,,	John Chappell Holman, of London Street, Fitzroy Square, in the county of Middlesex, and Edward Walter Holman, of Grafton Street, Fitzroy Square, in the same county, Pianoforte Manufacturers.	An improved pianoforte action.
2203	4th Oct., 1858.	Louis A. Normandy, junior, of 67, Judd Street, London, in the county of Middlesex.	Improvements in the manufacture of sulphate of copper.
2205	,,	Francis Trevithick, of Penzance, in the county of Cornwall.	Improvements in applying sails and keels to boats and vessels.
2206	5th Oct., 1858.	James Mills, of Manchester, in the county of Lancaster, Machinist.	Certain improvements in machinery or apparatus for roving, slubbing, or spinning cotton and other fibrous materials.
2210	,,	Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent.	Improvements in the means of or arrangements for working steam expansively.
2216	,,	Moritz Jocoby and Frederic Rainford Ensor, of Nottingham.	Improvements in the manufacture of bobbin, net, or twist lace, and other fabrics made in twist lace machines.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2217	6th Oct., 1858.	Jozé Luis, Patent Agent, of No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex.	A new method of joining sheet iron, cast iron, gutta-percha, and other tubes by means of muffles.
2219	„	George Collier, of Halifax, in the county of York.	Improvements in winding machines.
2221	„	Christopher Hill, of the Great Western Railway Chippenham Station.	Improvements in omnibuses, and in apparatus for upholding the windows of omnibuses and other carriages.
2222	„	James Ridsdale, of Stoke Newington, in the county of Middlesex, Accountant.	An improved reservoir or fountain pen.
2224	„	Daniel Scattergood, of Nottingham, Machine Builder, and Robert Walker Smith, of Nottingham, Hosier.	Improvements in machinery for the manufacture of looped fabrics.
2225	„	Charles Baylis, of the Poultry, in the city of London, Solicitor.	An improved mode of constructing and arranging underground chambers in populous cities or towns for the reception of gas and water pipes and telegraph wires.
2226	7th Oct, 1858.	Donald Nicoll, of the firm of H. J. and D. Nicoll, 114, Regent Street, and 22, Cornhill, London.	Improvements in the manufacture of cloaks and other garments, and for their application to purposes to which they have not hitherto been applied.
2234	8th Oct., 1858.	Jozé Luis, of No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, Patent Agent.	A new cutting and stamping press.
2236	„	Edward Villiers Rippingille, of the parish of Chorlton-upon-Medlock, Greenheys, Manchester, Artist.	The improvement of fire-arms and artillery.
2238	„	Joseph Mitchell, Worsted Spinner, Hiram Mitchell, Manager, and Thomas England, Mechanic, all of Bradford, in the county of York.	Improvements in means, machinery, or apparatus employed in spinning wool, mohair, alpaca, silk, and other fibrous substances.
2240	„	Alfred Nicholls, of Manchester, in the county of Lancaster, Merchant, and Thomas Walker, of Birmingham, in the county of Warwick, Clerk.	An improved spring-hook catch or fastening.
2241	„	William Augustus Munn, of Throwley House, near Feversham, in the county of Kent (late a Major in the East Kent Regiment of Militia), a Deputy Lieutenant and Justice of the Peace of the said county of Kent.	Improvements in horse hoes.
2242	„	Thomas Roberts and John Dale, of Manchester, in the county of Lancaster, Manufacturing Chemists.	An improved process for obtaining salts of soda and other alkalies.
2246	„	Evan Birchley, of Upper Severn Terrace, in the city of Worcester, Attorney's Clerk.	An improved construction of cartridge.
2247	„	Frederick William Gerhard, of Tichborne Street, Haymarket, in the county of Middlesex, Mineral Surveyor.	Improvements in the manufacture of aluminuim and sodium.
2248	9th Oct., 1858.	Antoine Ephrem Galliard, 2, Seymour Place, St. James' Churchyard, Clerkenwell, Middlesex.	Making self-supplying portable fountains to play water or water perfumed.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2251	9th Oct., 1858.	Lewis Hope, of Bishopsgate Church Yard, in the city of London, Merchant.	Improvements in electric telegraph cables.
2252	,,	William Crofts, of Lenton Terrace, Park Side, Nottingham, Manufacturer.	Improvements in the manufacture of fabrics by bobbin net or twist lace machinery.
2255	11th Oct., 1858.	Alexander Miller, of Glasgow, in the county of Lanark, North Britain, Engineer.	Improvements in locomotive steam engines.
2257	,,	Charles Frédéric Vasserot, of 45, Essex Street, Strand, London, Patent Agent.	Improvements in constructing reflectors.
2265	,,	Anton Von Schuttenbach, of St. Petersburgh.	Improvements in lamps.
2266	,,	Thomas Riddell, of Carracow Terrace, Old Ford, Bow, in the county of Middlesex, Gentleman.	An improved arrangement for sustaining window sashes and sliding panels.
2268	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improved apparatus for facilitating submarine explorations.
2271	12th Oct., 1858.	Thomas Cotterill Shaw, of Hanley, in the county of Stafford, Architect and Surveyor, and Frederic Henshaw Cooper, of Hanley aforesaid, Ironmonger.	A new or improved construction and mode of working engines by the agency of air or gases in conjunction with electricity for obtaining or producing motive power.
2272	,,	William Johnston, Merchant, and William Ross, Brass Founder, both of Glasgow, in the county of Lanark, North Britain.	Improvements in water closets and taps or valves.
2273	,,	William Smith, of Edinburgh, in the county of Midlothian, North Britain, Lithographer.	Improvements in transferring drawings or delineations in lithographic and zincographic processes.
2275	,,	Jean Alexandre Gasse, of Paris, in the empire of France, Merchant.	Improvements in railway breaks and in apparatus for working the same.
2280	13th Oct., 1858.	Robert Ridley, of Low Wortley, in the county of York, Engineer.	Improvements in safety cages for mine shafts.
2285	14th Oct., 1858.	John Charles Ollerenshaw, of Manchester, in the county of Lancaster, Merchant.	An improvement in cotton gins.
2288	,,	Charles Cowper, of No. 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent.	Improvements in the manufacture of articles of hard vulcanized india rubber and gutta percha, and similar gums.
2289	,,	Alexander Gordon, Member of the Institution of Civil Engineers in London, and residing at Little Fife House, Whitehall, in the city of Westminster.	Improvements for manufacturing cast iron, steel, and wrought iron.
2292	,,	William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	Improvements in tanning hides, and in apparatus employed therein.
2293	,,	Samuel Perkes, of Clapham - -	Improvements in machinery for extracting oil from the cocoa nut and other vegetable matters.
2295	,,	George Baxter, of Northampton Square, in the county of Middlesex.	Improvements in colouring photographic pictures.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2296	14th Oct., 1858.	Thomas Archer, junior, of Dunston, near Gateshead.	Improvements in apparatus for preventing explosions of steam boilers.
2297	,,	Squire Diggle, of Radcliffe, in the county of Lancaster, Machine Maker.	Improvements in looms for weaving.
2298	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	An improved construction of cabin or state room for steamboats and other vessels.
2301	15th Oct., 1858.	William Bacon, of Prestwich, in the county of Lancaster, Engineer.	Improvements in the mode of constructing valves, valve cocks, gates, and stop-cocks, which may be used in steam engineering and for other purposes.
2302	,,	George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent.	Improvements in the manufacture of gloves, and in the apparatus employed therein.
2303	,,	Thomas Moore, Brewer, of the firm of Tennant Brothers, Exchange Brewery, Sheffield, in the county of York.	Improvements in refrigerators.
2308	16th Oct., 1858.	Laurent Marcus, of the province of Algiers, in Africa, now in Paris, Gentleman.	An improved reaping machine.
2309	,,	Firmin Joseph Coulon and Simon Godefroid Giraud, of 2, Rue Sainte Appoline, Paris, empire of France, and of 45, Essex Street, Strand, London.	Improvements in the process of ornamenting skin and leather.
2310	,,	Thomas Wright Gardener Treeby, of No. 1, Westbourne Terrace Villas, Paddington, in the county of Middlesex, Gentleman.	An improvement in breech-loading fire-arms and cannon.
2312	,,	Joseph Pierre Gillard, of Paris, (France), Civil Engineer.	Improvements in generating hydrogen, and in the means of and apparatus for applying the same to lighting and heating purposes.
2313	,,	John Hick and William Hargreaves, both of the firm of Benjamin Hick and Son, of Bolton-le-Moors, in the county of Lancaster, Engineers, and Robert Harwood, of the same place, Millwright, in the employ of the said Benjamin Hick and Son.	Improvements in governors or regulators for prime movers.
2317	,,	Benjamin Nickels, of Mitcham, in the county of Surrey, Analytical and Metallurgic Chemist.	Improvements in electric telegraphs.
2318	18th Oct., 1858.	William Clay, of Ellesmere, in the county of Shropshire, Agricultural Implement Manufacturer.	Improvements in combined thrashing and dressing machines.
2326	,,	Alfred Wilks Drayson, of Plumstead, in the county of Kent, Captain in the Royal Artillery, and Charles Richard Binney, of Woolwich, in the same county, Captain in the Royal Engineers.	Improvements in submarine telegraphic cables.
2327	,,	John Smith, of Newport, in the county of Salop, Engineer.	Improvements in rough shoeing beasts of draught and burden.

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2328	19th Oct., 1858.	Edmund Walker, of London Street, in the city of London.	An improved filter.
2331	„	John Owen and Hindle Duckworth, both of Blackburn, in the county of Lancaster, Machinists.	Improvements in looms.
2334	„	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in apparatus for washing clothes and other articles.
2335	„	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in the hanging and arranging of cylindrical, conical, or spiral steel railroad springs for railway carriages.
2337	„	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Editor of the Mechanics' Magazine and Patent Agent.	Improvements in propelling vessels.
2338	„	John Grant, of Hyde Park Street, in the county of Middlesex, Captain late Royal Artillery.	Improvements in constructing and arranging ovens suitable for baking bread.
2339	„	William Riddle, of 1, Westbourne Terrace, Barnsbury Park, in the county of Middlesex.	Improvements in packing or forming merchandise or goods into bales.
2341	20th Oct., 1858.	Robert Dawson Clegg, of Manchester, in the county of Lancaster, Gentleman.	Improvements in screws.
2343	„	Robert Griffiths, of 69, Mornington Road, Regent's Park, London, Engineer.	Improvements in baths.
2345	„	John Wainwright, of Birkenhead, in the county of Chester, Dental Surgeon.	Improvements in ventilating houses and other places.
2346	„	Samuel Thomas Clarke, of 30, Kildare Terrace, Westbourne Park, in the county of Middlesex, Gentleman.	Improvements in apparatus for crossing bankers' cheques and drafts.
2348	21st Oct., 1858.	Jonas Marland, of Sun Vale Iron Works, Walsden, in the county of Lancaster, and Samuel Marland, also of Sun Vale Iron Works, Walsden, in the county of Lancaster, Machinists.	Certain improvements in power looms.
2352	„	Edwin Bartholomew Horn, of the state of Massachusetts, of the United States of America.	An improved compensation apparatus for a hair spring balance for a watch or time piece.
2354	„	James Baldwin, junior, of Birmingham, in the county of Warwick, Paper Manufacturer.	Improvements in files or holders for papers, letters, bags, and other similar articles.
2358	„	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in apparatus for lubricating railway axles and other bearings.
2361	22nd Oct., 1858.	James Bagnall and William Bagnall, of Westbromwich, in the county of Stafford, Ironmasters.	An improvement in the manufacture of iron.
2362	„	Alexander Shaw, of the Earle's Field Works, Grantham, in the county of Lincoln, Leather Dresser, and Fellmonger, and Glue and Parchment Manufacturer.	A new method or mode of raising nap on the linings of sheep skins.
2365	„	Charles Clay, of Walton Grange, Wakefield, in the county of York.	Improvements in apparatus for harrowing scarifying and cultivating land.

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2366	23rd Oct., 1858.	Edwin Palmer, of Thetford, in the county of Suffolk, Engineer, and Edward Palmer, of Thetford aforesaid, Iron Founder.	Improvements in machinery or apparatus for cutting hay, straw, or other similar substances.
2368	,,	Edward Clarence Shepard, of Jermyn Street, Westminster, in the county of Middlesex, Gentleman.	Improvements in electric lamps.
2369	,,	Rudolph Bodmer, of 2, Thavies Inn, Holborn, in the city of London.	An improved toy or plaything for children.
2372	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in pumps.
2373	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in telegraphic apparatus.
2376	25th Oct., 1858.	Joseph James Welch and John Stewart Margetson, both of Cheapside, in the city of London.	Improvements in the manufacture of scarfs for gentleman's wear.
2379	,,	Thomas Ashworth and Joseph Ashworth, of Pendleton, in the county of Lancaster, Manufacturers.	Certain improvements in power looms for weaving.
2380	,,	William Craddock and John White, both of Archer Street, St. James', in the county of Middlesex, Harness Platers.	Improvements in the connecting links of harness hames.
2381	,,	George Kent, of High Holborn, in the county of Middlesex, Machinist.	An improved churn.
2382	,,	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	An improvement in the manufacture of candles.
2383	,,	Stephen Rossin Parkhurst, of the city and state of New York, United States of America.	Improvements in cotton gins.
2385	26th Oct., 1858.	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved machinery for pulverizing, kneading, pressing, and moulding clay and other plastic materials.
2389	27th Oct., 1858.	Jozé Luis, of the British and Foreign Office for Patents No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, Patent Agent.	A new machine for boring.
2391	,,	Adolphe Paul Auguste Beau, of 152, Regent Street, London.	A pocket stereoscope.
2392	,,	John Kinsey, of Brighton, Engineer -	Improvements in steam engines and pumps.
2395	,,	George Speight, of 19, Woodbridge Street, Clerkenwell, in the county of Middlesex, Artist in Hair.	Improved plaits and curls or ringlets for head dresses or ornaments, or additions to the natural hair, and an improved apparatus for the manufacture of curls or ringlets.
2398	,,	Thomas Almond, of 22, Pickering Place, Paddington, in the county of Middlesex, Engineer.	Improvements in furnaces for the better combustion of smoke.

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2399	27th Oct., 1858.	JOHN WILLIAM MOTT, of Lea Bridge Road, in the county of Middlesex.	Improvements in pouches of india rubber for holding tobacco or other substances.
2403	28th Oct., 1858.	JOHN WESTERBY, of Upper Aspley, Huddersfield, in the county of York, Engineer.	An improved application of steam to vessels filled with oil, tallow, or other materials for lubricating the cylinders of steam engines of high or low pressure.
2404	„	CHARLES POOLEY, of the city of Manchester, Cotton Spinner.	Certain improvements in and applicable to carding engines and other machines for preparing cotton and other fibrous materials.
2405	„	TIMOTHY RAILTON, of the city of Manchester, Manufacturer.	Improvements in the apparatus employed in the manufacture of cap or bonnet fronts.
2410	„	JAMES SMITH, of the city of Bristol, Horsehair, Seating and Curled-hair Manufacturer.	Improved hats and coverings for the head.
2415	29th Oct., 1858.	PETER WRIGHT, of Dudley, in the county of Worcester, Manufacturer.	Improvements in the manufacture of anvils.
2416	„	WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	An improved method of attaching wheels to the axles of railway carriages.
2418	„	JAMES WRIGHT, of 21, Bridge Street, Blackfriars, London, county of Middlesex, Civil Engineer.	An improved application of machinery to be used as a new motive propelling power.
2419	„	GEMINIANO ZANNI, of Union Street, Barnet, in the county of Middlesex.	Improvements in arranging magneto-electric machines for medical and other purposes.
2422	„	LESTER JOHN LEWIS, Jeweller, of New Bridge Street, Birmingham, in the county of Warwick.	Certain improvements in fastenings for ladies' dresses and other such like purposes, as also in the machinery for manufacturing the same.
2423	„	JOHN MORRIS, of Broughton, Salford, in the county of Lancaster.	Improvements in the manufacture of rollers or cylinders for printing fabrics.
2424	„	JAMES DRUMMOND, of Cameron Bank, in the county of Midlothian, North Britain, Farmer.	Improvements in reaping and mowing machines.
2427	30th Oct., 1858.	EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, W.C.	Improvements in machinery or apparatus to prevent railway accidents.
2428	1st Nov., 1858.	FRANCIS WRIGLEY, of Manchester, in the county of Lancaster, Consulting Engineer.	An improved self-acting safety coupling for railway and other purposes.
2430	„	CHARLES VERO, of Atherstone, in the county of Warwick, Hat Manufacturer, and JAMES EVERITT, of Atherstone aforesaid, Hat Manufacturer.	Improvements in the manufacture of hats and other coverings for the head, a part of which improvements is also applicable to the manufacture of felt.
2431	„	HENRY HENSON HENSON and WILLIAM FREDERICK HENSON, of No. 38, Parliament Street, in the city of Westminster.	Improvements in the manufacture and treatment of starch for domestic purposes.

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2432	1st Nov., 1858.	JOHN DOBSON and DANIEL PEARCE, of Saint James' Street, in the county of Middlesex, Glass Manufacturers.	Improvements in the manufacture of bird cages.
2433	„	JOHN CARISS, of York, Yorkshire - -	An improved safety switch box and gear.
2434	„	EDWARD MAYNARD, of Brooklyn, in the county of Kings, and state of New York, United States of America.	Improvements in submarine telegraph cables.
2435	„	CHARLES PERLEY, of the city and state of New York, United States of America.	Certain improved means for disconnecting boats from the davit blocks and effecting other like objects.
2436	„	WILLIAM PALMER, of the city and state of New York, United States of America.	Improvements in fire-arms.
2438	2nd Nov., 1858.	MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France.	An improved system of railway brakes.
2439	„	MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France.	An improved combination for the production of voltaic electricity, and its application as a curative agent to certain parts of the human body.
2441	„	NEHEMIAH BROUGH, Machinist, of Birmingham, in the county of Warwick.	Certain improvements in buttons, and in the means of attaching them to garments which said means is also applicable for other purposes.
2442	„	ROBERT CREED SMITH, of Birmingham, in the county of Warwick, Glass Mould Maker.	A new or improved buoy or wreck intelligencer.
2450	3rd Nov., 1858.	SMITH BOTTOMLEY, of Bradford, in the county of York, Warehouseman to Messrs. Churton, Bankart, and Hirst, of Bradford, in the said county, Stuff Merchants.	Improvements in the manufacture of moreens and other fabrics of a similar character.
2453	„	VICTOR BLUMBERG, of Bloomfield Lodge, Notting Hill, in the county of Middlesex, Gentleman.	Improvements in the construction of slate billiard tables, which improvements are also applicable for other useful purposes.
2455	„	DANIEL FRYER, THOMAS LEACH CROSS WATT, and WILLIAM HOLMES, all of No. 48, Paternoster Row, in the city of London.	Improvements in tanning hides and skins.
2456	„	PETER ALFRED MAWDSLEY, of Seacombe, in the county of Chester, Smalt Manufacturer.	Improved machinery or apparatus for drying yarns after being sized or stiffened, and the use or application of a certain substance or substances in the sizing, stiffening, or otherwise preparing yarns and woven fabrics, or either of them.
2457	„	PETER ALFRED MAWDSLEY, of Seacombe, in the county of Chester, Smalt Manufacturer.	The use or application of a certain substance or substances in the manufacture of stiffening or sizing of paper.
2461	4th Nov., 1858.	JOHN OXLEY, of Camden Town - -	Improvements in carriages and wheel vehicles.

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2463	4th Nov., 1858.	George Palmer Evelyn, of Eccleston Terrace, in the county of Middlesex, Esquire.	The improvement of the form of the stocks of rifles, carabines, and other fire-arms.
2471	5th Nov. 1858.	Thomas Till, of Hooper Street, in the borough of Birmingham, in the county of Warwick, Mechanic.	Improvements in machinery for making nails and for other analogous purposes where metal is compressed, by dies or stamps.
2472	„	Thomas Briggs Smith, of Marietta, in the state of Ohio and United States of America.	Preparing wood so as to be used as a substitute for curled hair, in the manufacture of mattresses, and in the other purposes to which curled hair and its substitutes are applied.
2477	„	Louis Schwartzkorf and Ferdinand Carl Philippson, both of Berlin.	Improvements in machinery for boring holes in rocks and minerals for blasting and other similar purposes.
2482	6th Nov., 1858.	Alfred Fryer, of Manchester, in the county of Lancaster, Sugar Refiner.	An improved method of supplying the tenders of locomotive engines, and of supplying boilers with water.
2485	„	John Cliff, of the Imperial Potteries, Lambeth, in the county of Surrey.	Improvements in the construction of kilns for burning stone-ware, red-clay ware, porcelain, and all other kinds of earthenware.
2487	„	Wilhelm Ziervogel, of Hettstädt, near Eisleben, in the kingdom of Prussia.	Improvements in apparatus for distilling products from bituminous coal, schist, peat, and other like substances.
2489	„	James Jackson, Aaron Fisher, and John Jones Harney, of Sheffield, in the county of York, Crinoline Manufacturers.	Improvements in the manufacture of strips or bands of steel, and in the machinery or apparatus to be employed therein.
2491	8th Nov., 1858.	John Richmond, Engineer and Machinist, of 21, Carlisle Terrace, Fairfield Row, Bow, in the county of Middlesex, Joseph Quick, junior, and Alexander Fraser, Civil Engineers, both of Sumner Street, Southwark, in the county of Surrey.	Construction of a meter for measuring water, spirits, or any other fluids.
2493	„	Emile Alcan, of 4, Coleman Street Buildings, in the city of London, Merchant.	An improved method of treating or preparing materials to be manufactured into paper, applicable to lie-washings in general.
2494	„	Arthur Hyde Dendy, of 27, Fortess Terrace, Kentish Town, in the county of Middlesex, Esquire, Master of Arts.	Improvements in the construction of breakwaters or wave screens, applicable also in constructing bridges, roadways, piers, jetties, landing stages, and other structures.
2495	„	Jonathan Wardill, of Commercial Road East, in the county of Middlesex, Engineer.	Improvements in purchases for the raising and lowering of weights by means of chains, especially applicable to ship's capstans and windlasses.
2496	„	Thomas Mac Sweney, of 25, Rood Lane, in the city of London.	Improvements in steering apparatus.
2497	„	William Hale, of 6, John Street, Adelphi, in the county of Middlesex.	Improvements in rockets.
2498	„	William Smith, of Little Woolstone, in the county of Buckingham.	Improvements in apparatus for supporting the hauling ropes when hauling ploughs and other agricultural implements by steam power.

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2502	9th Nov., 1858.	Edward Ellis Allen, of Brompton Row, in the county of Middlesex, Engineer.	Improved machinery or apparatuses for working the propellers of vessels.
2503	„	John Samuel Dawes, of Smethwick House, near Birmingham, Gentleman.	A new or improved machine to be used for cultivating land, and which may be made applicable as a hoe, a skim, a turf or peat cutter, and a new or improved method of actuating the said machine and other machines used for like operations.
2504	„	John Farmerley Dickson, of No. 6, Russell Street, Litchurch, near Derby, in the county of Derby, Engineer.	Improvements in the construction of railway chairs and other details connected with the permanent way of railways.
2510	„	William Clark, of 53, Chancery Lane, in the county of Middlesex, Patent Agent and Engineer.	Improvements in signals for railways, and in apparatus for actuating the same.
2513	„	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved apparatus for obtaining extracts or decoctions.
2515	„	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in electric telegraphing.
2520	10th Nov., 1858.	William Garnett Taylor, of Ashby-de-la-Zouch, in the county of Leicester.	Improvements in removing the fur from skins, and preparing said skins for tanning.
2522	„	Edward Humphreys, of Deptford, Engineer.	Improvements in steam engines and boilers.
2524	„	Abraham James Brooks, of Southsea, in the county of Hants, Solicitor.	An improvement in screw propellers.
2527	„	Charles Tiot Judkins, of No. 32, York Road, Lambeth, in the county of Surrey, Engineer.	Improvements in gas regulators.
2528	11th Nov., 1858.	John Blethyn, of Swansea, in the county of Glamorgan, Engineer.	Improvements in the manufacture of fuel.
2529	„	James Lees, of Oldham, in the county of Lancaster, Tin Plate Worker, and William Lees, of the same place, Engineer.	An improvement in the construction of oil cans.
2531	„	Frederick Herbert Maberly, of Stowmarket, in the county of Suffolk, Master of Arts.	Improvements in the construction of ships of war and other vessels, their machinery and appurtenances.
2532	„	Martin Benson, late of Cincinnati in the United States of America, but now residing at Newcastle, Mechanical Engineer.	An improved manufacture of rails for railways.
2533	„	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved apparatus for securing doors of safes, closets, and apartments.
2542	12th Nov., 1858. „	George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey.	An improved apparatus for illustrating conic sections and the lines of the globe.
2543	13th Nov., 1858.	Mark Nield Mills, and Nathan Sidebotham, both of Ashton-under-Lyne, in the county of Lancaster, Machinists.	Certain improvements in looms for weaving.

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2544	13th Nov., 1858.	JOHN BENYON, of Swinton, near the city of Manchester, Manager, and JOHN WARBURTON BRIDGE BOWDEN, of the same place, Manufacturer.	Certain improvements in looms for weaving.
2546	„	WILLIAM ASHTON, of Preston, in the county of Lancaster, and THOMAS CARTMELL, of the same place, Engineers.	Improvements in air pumps, part of which improvements is also applicable to the pistons of other pumps and of steam engines.
2547	„	JOHN COURAGE, of Horsleydown, in the county of Surrey, Brewer, and FREDERICK BENNETT, of Holywell, in the county of Flintshire, Smelter.	Improvements in furnaces for reducing and smelting ores, scoria, slag, and waste.
2548	„	JAMES TAYLOR, of Birkenhead, Engineer -	Improvements in portable steam engines.
2549	„	DAVID AULD, of Glasgow, in the county of Lanark, North Britain, Engineer.	Improvements in furnaces and boilers, and in the generation and treatment of steam.
2551	„	LOUIS PETRE, of Hatton Garden, in the county of Middlesex, Glass Silverer.	Improvements in the application of glass to ornamental and useful purposes.
2552	„	ISAAC LIVERMORE, of 5, Shrubland Grove, East Queen's Road, Dalston, in the county of Middlesex.	An improvement in the manufacture of shuttlecocks.
2554	„	CHRISTOPHER JAMES THOMAS, THOMAS THOMAS, HERBERT THOMAS, and CHARLES THOMAS, all of the city of Bristol, Soap Manufacturers and Copartners.	An improvement in the manufacture of caustic alkaline lees.
2555	„	ALONZO BUONAPARTE WOODCOCK and JOHN MACMILLAN DUNLOP, both of Manchester.	Improvements in covering rollers, shafts, and tubes of any figure or material. with elastic shells or covers of vulcanized india rubber or other elastic substance, and in turning or grinding the surfaces of such elastic covers or shells.
2557	„	MATTHEW PULLAN, of Horsforth, near Leeds, in the county of York, Bleacher.	Improvements in machinery for drying yarns and other materials.
2558	„	JOHN ADDY HOPKINSON, of Huddersfield, in the county of York, Engineer.	Improvements in steam boilers.
2561	15th Nov., 1858.	ALLAN DICK, of Holywell, in the county of Flint Metallurgist.	A new or improved manufacture of a yellow pigment.
2562	„	GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent.	Improvements in the process of finishing piled fabrics, and in apparatus employed in such process.
2564	„	WILLIAM GEORGE ARMSTRONG, of the borough and county of Newcastle-upon-Tyne, Civil Engineer.	Improvements in the manufacture of ordnance.
2566	„	WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	Improvements in colouring, preserving, and desiccating wood and marble, and in apparatus for the same.
2567	„	WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	A new mode of advertising.

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2568	15th Nov., 1858.	JOHN GOLDING BUNTING, of the city of St. John, in the province of New Brunswick, in British North America, but at present at the Office for Patents, No. 4, Trafalgar Square, Charing Cross, in the county of Middlesex.	A mechanical horse-tamer or brake.
2569	16th Nov., 1858.	JOHN BRENNAND, of Manchester, in the county of Lancaster, Calico Printer.	Improvements in the method of effecting the locomotion of carriages, which improvements are also applicable to other similar purposes.
2570	„	JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in machinery or apparatus for kneading dough or working and mixing plastic materials.
2571	„	JOSEPH CONSTANT BOISNEAU, of Chatellerault, in the French Empire, Engineer.	An improved horse mill or gear.
2573	„	JAMES SAMUEL, of Great George Street, in the city of Westminster, Civil Engineer.	Improvements in sleepers or bearers for rails.
2579	17th Nov., 1858.	FREDERICK ALBERT GATTY, of Accrington, in the county of Lancaster, Manufacturing Chemist.	Improvements in producing certain colours on cotton, linen, and silk fabrics.
2580	„	STANISLAS HOGA, of No. 14, Nassau Street, Middlesex Hospital, WILLIAM PETER PIGGOTT, of No. 16, Argyle Street, Regent Street, and SEPTIMUS BEARDMORE, of No. 37, Upper Berkeley Street West.	Improvements in electric telegraphs.
2583	„	CHARLES FRÉDERIC VASSEROT, of 45, Essex Street, Strand, London, Patent Agent.	A flat clothes smoothing iron with moveable handles.
2854	„	JOSEPH HENRY TUCK, of Great George Street, Westminster, in the county of Middlesex, Civil Engineer.	Improvements in the mode of laying and securing telegraphic cables, and in apparatus for the same, and for carrying on other operations under water.
2586	„	EDWARD WELCH, of No. 63, St. John's Square, Clerkenwell, Tobacco Manufacturer.	Improvements in the manufacture of tobacco, and in apparatus therefor.
2587	„	JOHN ROBERTSON, of Saint Ninian's, in the county of Stirling, North Britain, Gentleman.	Improvements in musical instruments.
2588	„	MICHAEL SCOTT, of 3, Stanhope Terrace, Hyde Park Gardens, in the county of Middlesex.	Improvements in the construction of breakwaters, parts of which are applicable in making other structures.
2589	„	EDMUND MELLOR, of Rochdale, in the county of Lancaster, Engineer.	Improvements in mules and other machinery for spinning cotton and other fibrous substances whereby the cop will be built much firmer, and prevent snarls in the yarn.
2591	„	JOHN BRENNAND, of Manchester, in the county of Lancaster, Calico Printer.	An improvement in ploughs and in other agricultural implements, and in the method of driving the same.
2592	„	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E. C., Patent Agent.	Improvements in apparatus for the manufacture of lace and net.

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2594	17th Nov., 1858.	JOHN PLATT, of Oldham, in the county of Lancaster, Mechanical Engineer, and HARRY CHUBB, of Brecknock Crescent, Camden Town, in the county of Middlesex, Gentleman.	Improvements in machinery or apparatus for making bricks or tiles.
2595	„	WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	A process of thickening, strengthening, and improving tanned hides.
2598	18th Nov., 1858.	SAMUEL RILEY, of Oldham, in the county of Lancaster, Stamp Distributor and Agent.	Improvements in the manufacture of hats, bonnets, and caps.
5599	„	CHARLES COWPER, of No. 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent.	Improvements in assorting and separating combed fibres, and in machinery for that purpose.
2601	„	Sir CHARLES TILSTON BRIGHT, of Harrow Weald, in the county of Middlesex.	Improvements in insulators, and an improved mode of connecting insulators to posts and other supports.
2603	„	HENRY STOTT, of Greetland, near Halifax, in the county of York, Cotton Warp Manufacturer.	Improvements in warping mills or apparatus connected therewith.
2605	„	JOHN OAKES, of Exeter Row, Birmingham, in the county of Warwick, Spur Manufacturer.	Improvements in the manufacture of spurs.
2608	„	ELISHA THOMAS ARCHER, of Bridgefield House, Wandsworth, in the county of Surrey, Paper Manufacturer.	Improvements in hat ventilators and for appliances connected therewith.
2609	„	BENJAMIN RIDER, of 61, Red Cross Street, Boro' in the county of Surrey, Leather Dresser and Hat leather Manufacturer.	Improvements in ventilating hats and caps, and in the preparation or manufacture of the material of which those articles are made.
2612	19th Nov., 1858.	WILLIAM STEPHENS HAYWARD, of Whittenham House, Abingdon, in the county of Berkshire, Gentleman.	Improvements in the manufactureof a glutinous and viscous substance or dextrine, to be used in the manufacture of paper and in dressing textile fabrics, by which greater tenaciousness, smoothness of surface, and body is obtained.
2613	„	GEORGE HOWE, Engineer, and JOHN NORTON, Plumber, both of Sheffield, in the county of York.	An improved method of boiling water or worts for brewerys, distillerys, &c. by steam, or for heating rooms, public buildings, churches, chapels, factorys, &c.
2616	„	WALTER HANCOCK, of Upper Chadwell Street, in the county of Middlesex, Gentleman.	Improvements in the manufacture of electric telegraph wires and cables.
2618	„	HENRY HENSON HENSON, of 38, Parliament Street, in the city of Westminster.	Improvements in waterproofig fabrics or materials.
2619	„	WILLIAM RAMSCAR and JOHN GRAY SCOTT, of the city of Manchester, in the county of Lancaster.	Improvements in fire-arms.
2620	„	EDMUND ALFRED PONTIFEX, of the firm of Pontifex and Wood, of Shoe Lane, in the city of London, Engineers and Copper Smiths.	Improvements in external surface condensers.
2621	„	HENRY BAILEY, of 35, Golden Square, in the county of Middlesex, Warehouseman.	Improvements in heating razors.

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2622	19th Nov., 1858.	William Clark, of 53, Chancery Lane, in the county or Middlesex, Engineer and Patent Agent.	Improvements in purifying natural phosphates of lime.
2626	„	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in the construction of electric telegraph cables or conductors.
2627	„	Arthur James Thorman, of 8, Lime Street, in the city of London, Ship Agent.	Improvements in chain cables and chains.
2629	„	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved apparatus for transmitting motive power.
2632	20th Nov., 1858.	James Wadsworth, of Salford, in the parish of Manchester, and county of Lancaster, Machinist.	Improvements in gas-burners, and in the means or methods of and in apparatus for moderating or retarding, regulating, or governing the flow and pressure of gas used for purposes of illumination and in street lamps or lanterns for shielding flame from the action of wind and rain.
2633	„	Charles Fréderic Vasserot, of 45, Essex Street, Strand, London, Patent Agent.	Improvements in fire-arms and ordnance and in the projectiles to be used therewith.
2635	„	Henry Ellis, of Holbeach, in the county of Lincoln, Engineer and Agricultural Implement Maker.	Improvements in machinery or apparatus for cultivating, cleaning, and pulverizing land.
2636	„	Charles Tomlison, of Worcester Street, Wolverhampton, in the county of Stafford, Accountant.	Improvements in stop taps or valves.
2637	„	Charles Cuit, of Paris, in the empire of France, Manufacturer.	Improvements in railway brakes.
2643	„	John Young, of Wolverhampton, in the county of Stafford, Manufacturer.	Improvements in fastenings for window-sashes and casements and in chain used for suspending window-sashes,
2646	„	Heman Gardiner, of the city of New York, in the United States of America, Mechanical Engineer.	Improvements in the compound axle hub and wheel for railroad cars.
2648	22nd Nov., 1858.	Robert Nelson, of New York, in the United States of America, temporarily residing at Ramsay, in the Isle of Man, Mariner.	Improvements in apparatus for raising and lifting water and other liquids.
2651	„	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved apparatus for propelling and steering vessels.
2652	„	Edward Hammond Bentall, of Heybridge, in the county of Essex, Ironfounder.	An improvement in the construction of turnip cutters.
2655	23rd Nov., 1858.	William Henry Dawes, of Bromford, Ironworks, West Bromwich, in the county of Stafford, Iron Master.	An improvement in forge hammers and in the anvils used with forge hammers and squeezers.
2660	„	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved machinery for sweeping floors.

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2663	24th Nov., 1858.	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	An improvement in cigar cases.
2666	„	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved machinery for making bolts and rivets.
2669	„	James Syson Nibbs, of the Manor of Aston, in the county of Warwick, Lamp and Chandelier Manufacturer.	Improvements in lighting, heating, and ventilating.
2674	25th Nov., 1858.	Rudolph Bodmer, of 2, Thavies Inn, Holborn, London.	Improvements in valves for regulating the supply of steam.
2675	„	Jozé Luis, of the British and Foreign Office for Patents, No. 1 B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, Patent Agent.	A safe guard against burglars.
2678	„	Frederick Herbert Maberly, of Stowmarket, in the county of Suffolk, Master of Arts.	Improvements in candlesticks.
2679	„	Charles Parker, of Dundee, in the county of Forfar, North Britain, Engineer.	Improvements in looms for weaving.
2680	„	Frederick Loos, of Mercer Street, Long Acre, London.	Improvements in gas regulators.
2683	26th Nov., 1858.	Jozé Luis, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, Patent Agent.	A new sort of drawers or trowsers for ladies or children.
2685	„	Edwin Dixon, of Wolverhampton, in the county of Stafford, Manufacturer, and John Fisher, of Wolverhampton aforesaid, Tube Drawer.	An improvement in the manufacture of welded iron tubes.
2687	„	Michael Meyers, of No. 9, Great Alec Street, Goodman's Fields, London, Umbrella and Parasol Manufacturer.	Improvements in parasols.
2691	„	John Billington Booth, of Preston, in the county of Lancaster, Spindle Manufacturer.	Improvements in machinery or apparatus for preparing, spinning, doubling, and winding cotton and other fibrous materials.
2693	„	Price Griffiths and John Brennand, both of Burnley, in the county of Lancaster, Engineers, &c.	Improvements in lubricators for introducing lubricating matter into steam cylinders and other chambers or parts under pressure.
2698	27th Nov., 1858.	Robert Alexander, of Dillichip, in the county of Dumbarton, North Britain, Bleacher.	Improvements in treating, preparing and bleaching textile fabrics and other materials.
2701	„	Charles Burrell, of Thetford, in the county of Norfolk, Engineer.	Improvements in traction engines and carriages.
2702	„	George Bowden Sander, of High Holborn, in the county of Middlesex.	Improvements in jugs.
2704	„	Squire Diggle, of Ratcliffe, in the county of Lancaster, Machine Maker.	Improvements in pattern chains or other such apparatus used in weaving.
2706	29th Nov., 1858.	Louis Antoine Possoz, Chemist, of Rue Neuve St. Augustin, No. 9, Paris, in the empire of France.	Manufacturing alkalies and obtaining simultaneously other chemical products.

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2707	29th Nov., 1858.	George Oates, of Gatefield Works, Sheffield, in the county of York, Scissors Manufacturer.	Improvements in the manufacture of scissors.
2710	,,	George Collier and William Noble, both of Halifax, in the county of York.	Improvements in means or apparatus for the manufacture of spokes for carriage wheels, which improvements are also applicable to the cutting of wood for other purposes.
2711	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improved expansion or cut-off gear for steam engines.
2712	,,	George Hadfield, of Carlisle, Varnish Manufacturer.	Improvements in the construction of carboys, barrels, and other vessels of capacity.
2713	,,	William Parsons, of Bitterm, near Southampton, in the county of Hants, Bricklayer.	Doing away with the smell arising from the melting fat tallow, &c., and also for an improvement in stirring and straining the same.
2716	,,	William Arthur Henry, of Sheffield, in the county of York, Engineer.	Improvements in machinery or apparatus for attaching the soles and heels of boots and shoes to the upper leathers, and in the fastenings employed for that purpose.
2717	,,	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in locomotive engines.
2720	,,	Caleb Bedells, of Leicester.	Improvements in the manufacture of elastic fabrics, and the machinery employed in this manufacture.
2721	,,	John Gresham, of Hull, Esquire.	Improvements in apparatus for preserving ships' papers and other papers and writings in case of the loss of or accident to a ship whilst at sea.
2723	,,	Daniel Evans, of Chobham Cottages, New Town, Stratford, in the county of Essex, and George Jones, of Charlotte Place, Upper Kennington Lane, in the county of Surrey, Engineers.	Improvements in pumps and water guages.
2729	30th Nov., 1858.	John Thow and Thomas Mitcheson Hall, both of Preston, in the county of Lancaster, Engineers.	Preventing the fusion of the fire bars in locomotive or other furnaces.
2730	,,	August Emil Clemens Scheidel, of the firm of Gouda, Scheidel and Company, of Frankfort-on-the-Main, in Germany, and Watling Street, in the city of London, Manufacturers.	Improvements in fastenings for belts, braces, garters, books, porte-monnaies, portfolios, pocket books, invoice, writing and cigar cases, reticules, bags, and other similar articles or purposes.
2733	,,	Joseph Colyer, of Leman Street, in the county of Middlesex, Cooper and Back Maker.	Improvements in machinery and apparatus for cutting and shaping staves, and other parts of casks.
2736	1st Dec., 1858.	Robert Henry Bow, of Edinburgh, in the county of Midlothian, North Britain, Civil Engineer.	Improvements in railway chairs and fastenings.
2738	,,	Edward Jones, of Dudley, in the county of Worcester, Manager of Iron Works.	An improvement or improvements in the manufacture of coke in ovens.

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2739	1st Dec., 1858.	Thomas Paramore Purssglove, of Battersea, in the county of Surrey.	An improved pressure gauge for steam, gas, or other fluids.
2740	,,	Richard Laming, of Hayward's Heath, in the county of Sussex.	Improvements in purifying gas, and in turning sulphuretted hydrogen, carbonic acid, and ammonia, or their compounds to profitable account.
2742	,,	James Samuel, of Great George Street, in the city of Westminster, Civil Engineer, and John Nicholson, of Wellington Street, Bromley, in the county of Middlesex, Engineer.	Improvements in and in connection with marine and other steam engines.
2743	,,	Ebenezer Viney, of the firm of John Viney and Son, of Cornhill, in the city of London, Portmanteau Manufacturers.	An improvement in the construction of portmanteaus, desks, dressing cases, despatch boxes, and other like articles.
2744	,,	Henry Adcock, of the City Road, in the county of Middlesex.	Improvements in furnaces and apparatus for annealing wire.
2745	,,	Frederick Warner, of Jewin Street, in the city of London, John Derbyshire, of Longton, in the county of Stafford, and Alexander Mann, of Little Britain, in the city of London.	An improvement in the mannfacture of cocks or taps.
2748	,,	Samuel Newington, of Ticehurst, in the county of Sussex.	Improvements in agricultural implements.
2750	,,	Frederick Fincham, of Ravenhead, in the county of Lancaster, Esquire.	Improvements in the construction of annealing kilns or ovens.
2752	,,	John Lewis, of Elizabeth, in the county of Essex, and state of New Jersey, United States of America.	Improvements in means for attaching sails to the yards of ships or vessels.
2753	,,	Edmund Leopold Benzon, of Sheffield, in the county of York, Steel Manufacturer.	The manufacture of useful alloys of aluminium.
2754	2nd Dec., 1858.	Lauchlan MacKirdy, of the Glebe Sugar House, Greenock, in the county of Renfrew, North Britain, Sugar Refiner.	Improved combined bathing, washing, and water-closet apparatus.
2755	,,	Lauchlan MacKirdy, of the Glebe Sugar House, Greenock, in the county of Renfrew, North Britain, Sugar Refiner.	Improvements in the manufacture of sugar.
2759	,,	John Baillie, of Vienna, in the empire of Austria, Engineer.	Improvements in the construction of railway wheels.
2762	3rd Dec., 1858.	Thomas Bailey, of New Orleans, United States, and of 17, Russell Street, Birmingham, in the county of Warwick, Gun Manufacturer.	A mechanical movement applicable to loading fire-arms and other purposes.
2764	,,	George Edward Noone, of No. 28, Hodson Street, Francis Street, Newington Butts, in the county of Surrey, Engineer.	Certain improvements in machinery for generating gas from coal.
2770	,,	Henry Bevan, of Shrewsbury, in the county of Salop, Accountant.	New or improved machines for effecting or facilitating arithmetical operations.
2771	4th Dec., 1858.	John Cameron, of Glasgow, in the county of Lanark, North Britain, Engineer.	Improvements in apparatus for the manufacture of sugar.
2773	,,	Lawrence Wood Fletcher, of Bleaklow, near Bury, in the county of Lancaster, Spinner and Manufacturer.	Improvements in the construction of electric telegraph cables.

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2774	4th Dec., 1858.	James Brooks Fisher and John Fisher, of Stourbridge, in the county of Worcester, Fire Brick Manufacturers, and James Bird the younger, of Kingswinford, in the county of Stafford, Agent.	An improvement in the doors and dampers of furnaces and other places where intense heat has to be resisted.
2775	,,	Ralph Pickering, of Lockerbie, in the county of Dumfries, Railway Inspector.	Improvements in communicating signals from one part of a railway train to another.
2776	,,	Edouard Aristide, Servier, of Paris, in the empire of France, Engineer.	Improvements in pressure and fluid level indicators.
2777	,,	Thomas Sibley, of Ashton-under-Lyne, in the county of Lancaster, Machine Maker.	Improvements in looms for weaving.
2779	,,	Jean Baptiste Antoine Monnier, of Nemours (Seine et Marne), France.	Improvements in actuating railway brakes.
2781	,,	Henry Thomas Yates, of Hounds Gate, Nottingham.	Improvements in the manufacture of boards or sheets when wood saw-dust is used.
2783	,,	Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent.	Improvements in weaving, and in looms or apparatus employed therein.
2784	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Certain improvements in grain and grass harvesting machines.
2788	6th Dec., 1858.	James Greene Arnold, of Worcester, Massachusetts, in the United States of America.	Improvements in envelopes for letters and similar purposes.
2791	,,	George Snell, of Leeds, in the county of York, Cloth Finisher.	Improvements in machinery or apparatus for cutting woollen fabrics.
2792	,,	John Dawson, of Holbeck, in the parish of Leeds, in the county of York, Machine Maker.	Improvements in machinery or apparatus for raising the nap on woollen cloths.
2793	,,	David Blair White, of Newcastle-upon-Tyne, in the county of Northumberland, Doctor of Medicine.	Improvements in indicating-gauges.
2795	,,	Frederick William Fletcher, of Erdington, near Birmingham, in the county of Warwick, Tube and Nail Manufacturer.	Improvements in bolts for securing doors and for other similar purposes.
2797	7th Dec., 1858.	James Edward Boyd, of Hither Green, Lewisham, in the county of Kent, Gentleman.	Improvements in the construction of taps, valves, cocks, spiggotts, or other apparatus or instruments for guaging or for drawing off the liquid or fluid contents of any cask, butt, vat, barrel, or other vessel.
2804	,,	John Vickers Scarborough, of Belfast, in the county of Antrim, Ireland, Gutta-percha Boot Manufacturer.	Improvements in apparatus for the manufacture of boots and shoes.
2806	,,	William Burness, of 2, Prospect Terrace, Brixton, in the county of Surrey.	Improvements in pumping and forcing liquids.
2809	,,	Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France.	An improved apparatus for ascertaining and registering the work of certain kinds of lever balances.

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2810	8th Dec., 1858.	George Frederic Chantrell, of Liverpool, in the county of Lancaster, Furnace Engineer.	Improvements in apparatus applicable to the manufacture and revivification of animal or vegetable charcoal.
2818	,,	Henry Meidinger, of the University of Heidelberg, Germany.	Improvements in electric batteries.
2819	9th Dec., 1858.	Robert Lloyd Burrowes, of St. Helen's, in the county of Lancaster, Professor of Music, and John Knowles, junior, of the same place, Mine Surveyor.	Certain improvements in the construction of pianofortes and organs.
2820	,,	John Barrow, junior, of the city of Manchester, in the county of Lancaster, Manufacturing Chemist.	Improvements in the treatment of coal gas tar and of the oils obtained by the distillation of the same, and for the application of substances obtained thereby.
2821	,,	Henry Maudslay, of No. 4, Cheltenham Place, Lambeth, in the county of Surrey, Civil Engineer.	Improved glass and other vitreous vessels.
2822	,,	Joseph Eccles, of Blackburn, in the county of Lancaster, Cotton Manufacturer.	Improvements in arrangements and machinery for preparing for manufacture and for manufacturing clay and other plastic earths into bricks, tiles, pipes, and other articles formed of such materials.
2825	,,	John Elder, of Glasgow, Engineer - -	Improvements in paddle wheels.
2826	,,	James Stewart, of 69, Tottenham Court Road, in the county of Middlesex.	Improvements in the construction of the action of pianofortes.
2827	,,	Thomas Allen, of Clifton, Bristol, Ironmonger.	Improvements in folding bedsteads.
2828	,,	John Wilson, of Wansford, Northamptonshire.	Improvements in machinery for tilling and cultivating land.
2830	,,	Etienne Léon Pensuete, of Dunkirk, in the empire of France.	Improvements in apparatus for driving or for drawing up piles by steam.
2833	10th Dec., 1858.	John Lightfoot, of Accrington, in the county of Lancaster, Calico Printer.	Improvements in printing or staining yarns, fabrics, or fibrous substances, and in the manufacture of certain compounds for that purpose.
2836	,,	Andrew Barclay, of Kilmarnock, in the county of Ayr, North Britain, Engineer.	Improvements in obtaining motive-power by means of electricity, magnetism, and electro-magnetism.
2840	,,	George William Bryant Kiallmark, of Bridgewater, in the county of Somerset, and William Thomas Timewell, of North Wharf Road, Paddington, in the county of Middlesex.	Improvements in the manufacture of cements.
2842	11th Dec., 1858.	John Bonar Guthrie, of Manchester, in the county of Lancaster, Warehouseman.	Improvements in the manufacture of india-rubber overshoes.
2843	,,	Stephen Dudgeon, of Sheffield, in the county of York.	An improved gas regulator.
2847	,,	Maximilien Schaffner, Civil Engineer, of Eisenach.	Improvements in smelting zinc ores, and in furnaces employed for this purpose.
2850	13th Dec., 1858.	John Anderton Carruthers, Reed Maker, and Thomas Blackburn, Mechanic, both of Blackburn, in the county of Lancaster.	Improvements in apparatus for guiding and regulating the warp threads in the operations of warping, tape sizeing, looming, and weaving.

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2851	13th Dec., 1858.	ROBERT WHITTAM, of Accrington, in the county of Lancaster, Engraver to Calico Printers.	Improvements in machinery or apparatus for tracing designs from an engraved roller or from an engraver's sketch upon steel or other metallic surfaces used as dies by engravers to calico printers.
2854	,,	JAMES EDWARD BOYD, of Hither Green, Lewisham, in the county of Kent, Gentleman.	Improvements in candlesticks, lamps, and lanthorns.
2855	,,	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in twisting and otherwise operating upon threads, twine, or cords, and in apparatus for performing the same.
2856	,,	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in the manufacture of cranked axles and shafts.
2858	,,	JAMES FERRABEE, of the Phœnix Iron Works, Stroud, in the county of Gloucester, Engineer.	Improvements in the construction of steam engines, and in the mode of working the same.
2859	14th Dec., 1858.	JAMES WEBSTER, of Birmingham, in the county of Warwick, Engineer.	A new or improved method of recovering copper and zinc from liquids, which have been employed to dip or pickle articles made of brass or other alloys containing copper and zinc.
2860	,,	EBENEZER BOW, of Port Dundas, in the county of Lanark, North Britain, Coal Master.	Improvements in pumps.
2862	,,	JOSEPH WADE, of Bradford, in the county of York, Manufacturer.	Improvements in means or apparatus employed in weaving.
2863	,,	GEORGE WILLIAMS BAKER, of Park Farm, Woburn, in the county of Bedford, Farm Steward.	An improved construction of manger fastening.
2866	,,	FERDINAND JOSSA, of Bishop Auckland, in the county of Durham, Chemist.	Improvements in furnaces for generating steam and other purposes.
2868	15th Dec., 1858.	DAVID ROWAN, of Greenock, in the county of Renfrew, North Britain, Engineer.	Improvements in steam engines.
2869	,,	HENRY BRIDGES, of Bridgewater, in the county of Somerset, Railway Carriage Builder.	Improvements in the means of working breaks on carriages on railways.
2870	,,	FRANÇOIS CHRISTOPHE NICOLAS JUVENAL VIELLARD-MIGEON, of Morvillars, Departement of Haut Rhin, France, Manufacturer of Wood Screws.	Improvements in manufacturing screws, rivets, nails, spikes, and all similar articles made of metallic wire, and in the machines connected therewith.
2871	,,	ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved machinery for manufacturing bullets.
2872	,,	ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	An improved arrangement of condensing apparatus.
2875	,,	WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	Improved agricultural implements.

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2880	16th Dec., 1858.	Robert Wilson senior, and Robert Wilson, junior, of Livesey Street, Manchester, in the county of Lancaster.	Certain improvements in the preparation of leather in combination with india rubber and other materials for the manufacturing of hose pipes, and other purposes where leather is required to be impervious to water, steam, or frost.
2882	„	Abel Stokes, of Birmingham, in the county of Warwick, Manufacturer, and Frederick Joseph Stokes, of Birmingham aforesaid, Manufacturer.	New or improved machinery for the manufacture of screws.
2883	„	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	A new or improved manufacture of cast steel.
2885	„	John William Edge, of Manchester, in the county of Lancaster, Gun Maker.	A certain improvement in balls, bullets, or other projectiles to be employed in fire-arms or ordnance.
2886	„	John Walter Friend, of Freemantle, Southampton, Watch and Clock Maker.	Improved apparatus for ascertaining and registering the depth and flow of liquids, and the distances run by ships at sea.
2888	„	Joseph Jean Marçais, of Paris, France, Civil Engineer.	Improvements in galvanic batteries.
2890	„	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Editor of the Mechanic's Magazine, and Patent Agent.	An improvement in plating and gilding forks, spoons, and other metal articles.
2891	„	William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	Improvements in submarine electric telegraph cables or conductors.
2893	17th Dec., 1858.	William Beckett Johnson, Manager for Messrs. Ormerod and Son, of Manchester, in the county of Lancaster, Engineers.	Improvements in machinery or apparatus for preparing for joining the rails of railways.
2897	„	James Clegg, of Keighley, in the county of York, Engineer.	Improvements in lubricating the valves and pistons of steam engines.
2898	18th Dec., 1858.	Isaac Ketchum, of 59, Canning Street, Liverpool, in the county of Lancaster, Merchant.	Improvements in the method of roasting meat, poultry, game, by basting the same, and in the method of manufacturing the necessary apparatus for so doing.
2899	„	John Aitken, of Irwell Vale Mill, Edenfield, near Bury, in the county of Lancaster, Manufacturer, and John Brooks, of the same place, Overlooker.	Improvements in looms.
2901	„	Alexander Mitchell, of Glasgow, Machinist.	Improved apparatus for registering the speed of engines and other machinery.
2902	„	James Taylor, of Birkenhead, Engineer -	Improvements in the construction of pumps or engines for lifting and discharging water.
2904	„	Emile Weber, of Mulhouse, in the empire of France, Chemist.	Improvements in dyeing or colouring textile fabrics and materials, aud in the machinery or apparatus connected therewith.
2905	„	James Soutter, of Edinburgh, in the county of Midlothian, Turner.	Improvements in apparatus for drying or airing linen or other articles of wearing apparel.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2907	20th Dec., 1858.	Thomas Swann Woodcock, of Salford, in the county of Lancaster.	An improved index or book and paper marker.
2908	,,	Samuel Hunter, of Newcastle-upon-Tyne, Gentleman.	Improvements in the construction of anchors.
2910	,,	James Ronald, of Liverpool, in the county of Lancaster, Merchant.	An improved machine for the direct spinning of hemp, flax, and other like fibrous materials.
2914	21st Dec., 1858.	William Elbert Dando, of the state of Pennsylvania, in the United States of America, at present residing in Manchester, in the county of Lancaster, Clerk.	Improvements in apparatus for lowering boats from ships or vessels, and also for raising the same as required.
2916	,,	Auguste Stanislas Béliard, of Bordeaux, in the empire of France, Hatter.	An improved machine for pumicing felts, tissues, and skins.
2917	,,	William Speakman Yates, of Leeds, in the county of York, Brush Maker.	Machinery or apparatus for dragging bristles and drawing hair and vegetable fibre.
2920	22nd Dec., 1858.	Robert Clegg, of Islington, in the county of Middlesex, Frederick Angerstein, of Kennington, in the county of Surrey, and George Ferry, of Hackney, in the said county of Middlesex.	Improved mechanism for imparting reciprocating motion to machinery, and more especially pumps.
2925	,,	William Spence, of 50, Chancery Lane, in the county of Middlesex, Patent Agent.	Improvements in granaries or apparatus for preserving grain.
2926	,,	Edward Thomas Dunn, of Hammersmith, in the county of Middlesex, Gentleman.	Improved fabrics suitable for the covering of floors, walls, and other like purposes.
2929	,,	Frederick Ransome, of Ipswich -	Improvements in the manufacture of grinding and rubbing surfaces.
2930	,,	Alexander Prince, of the Office for Patents, 4, Trafalgar Square, Charing Cross, in the county of Middlesex.	Improvements in ornamenting and illuminating surfaces of glass.
2933	23rd Dec., 1858.	James Ronald, of Liverpool, in the county of Lancaster, Merchant.	Improvements in and machinery for the manufacture of "hard topped" and "soft laid" twine, "mill banding," strands for ropes and other purposes, and cordage generally, from hemp, flax, cotton, and other like fibrous material.
2936	,,	John Whitelaw, of Dunfermline, in the county of Fife, North Britain, Ironfounder.	Improvements in sewerage and drainage apparatus.
2937	,,	Andrew Barclay, of Kilmarnock, in the county of Ayr, North Britain, Engineer.	Improvements in obtaining and distributing or applying electricity and magnetism, and in obtaining motive-power therefrom.
2939	24th Dec., 1858.	James Thomas Peter Newton and Thomas Smith, of Fenchurch Street, Naval Architects, and James Brown, of Follit Street, Engineer.	Improvements in machinery or apparatus for raising and lowering or otherwise moving heavy weights.
2941	,,	John Wright Child, of Halifax, in the county of York, Engineer.	Improvements in the manufacture of fabrics adapted to be used for curtains, coverings of furniture, table covers, and such like uses.
2942	,,	John Wright Child, of Halifax, in the county of York, Engineer.	Improvements in dyeing wool and other fibres.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2944	24th Dec., 1858.	Edward Fellows, of Canterbury, in the county of Kent, Clerk.	An improved vent peg.
2946	„	John Railton, of Blackburn, in the county of Lancaster, Machine Maker, and Seth Lang, of the same place, Mechanic.	Improvements in looms.
2950	„	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in the permanent way of railways.
2952	„	William Beckett Johnson, Manager for Messrs. Ormerod and Son, of Manchester, in the county of Lancaster, Engineers.	Improvements in the employment of gas for generating steam, and in engines connected therewith.
2954	27th Dec., 1858.	John Radley, of 22, Upper Sackville Street, in the city of Dublin, Hotel Keeper.	An improved cooking apparatus.
2956	„	Joseph Smethurst, of the firm of Messieurs Martin and Smethurst, of Guide Bridge, in the county of Lancaster, Engineers.	Certain improvements in metallic pistons.
2957	„	John Shaw, of Manchester, in the county of Lancaster, Mechanic.	A new mechanical combination called an indefinite feed movement.
2958	„	William Armand Gilbee, of No. 4, South Street, Finsbury, London, Patent Agent.	Improvements in treating fatty bodies and in the apparatus employed therein.
2959	„	James Macpherson, of Aberdeen, in the county of Aberdeen, North Britain, Comb Manufacturer.	Improvements in solidifying the raspings and other waste of horns and hoofs, and in applying the process to the cementing of prepared horns, hoofs, and tortoiseshell.
2960	„	John Davies, of Liverpool, in the county of Lancaster, Provision Merchant.	An improved portable self gas generating lamp.
2961	„	Claude Mamès Augustin Marion, of Paris, in the empire of France, Manufacturer.	An improved box or case for containing and preserving sensitive photographic paper, called Marion's box.
2962	„	Frederick William Turner, of Foxhole Colliery, Swansea, in the county of Glamorgan, Mechanical Engineer.	Improvements in steam-engines, condensers, and steam-boilers, and in promoting combustion in the furnaces of the same.
2963	„	Henry Lowe, of Birmingham, in the county of Warwick, Manufacturer, and William Trueman, of Birmingham, aforesaid, Axle Maker, and John Linwood Pitts, of Birmingham aforesaid, Accountant Clerk.	A new or improved axle for carriages.
2965	28th Dec., 1858.	Benjamin Browne, of No. 52, King William Street, London Bridge, E.C., Civil Engineer and Patent Agent.	Certain improvements in the manufacture of boots and shoes or other coverings for the feet, and in the mode or method of uniting the same or parts thereof.
2966	„	John Sinclair, of the city of Dublin, Ireland, Turner and Fitter.	Improvements in pistons.
2969	„	James Leck, of Glasgow, in the county of Lanark, North Britain, Bleacher.	Improvements in drying textile fabrics and materials.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2971	28th Dec., 1858.	JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in the manufacture of boots and shoes or other coverings for the feet.
2972	29th Dec., 1858.	WILLIAM HAWORTH, of the firm of Firth and Haworth, Cotton Spinners and Manufacturers, of that part of Todmorden which is in the county of York, and WILLIAM BARKER, of the same place, Overlooker.	Improvements in the top clearers of machines for spinning.
2976	,,	RICHARD DUGDALE KAY, of Accrington, in the county of Lancaster, Manufacturer of Patent Fabrics.	An improved chemical means of applying or fixing on woven or felted fabrics certain colouring matters produced from tar.
2977	,,	THOMAS PICKFORD, of Number 15, Mark Lane, in the city of London, Merchant.	Improvements in the preparation and manufacture of manure.
2980	,,	ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improvements in machinery for reaping and mowing.
2984	30th Dec., 1858.	HIPPOLYTE CHARLES VION, of Paris, in the empire of France, Civil Engineer.	A new mode of obtaining atmospheric electricity and terrestrial electricity and its industrial applications, and in apparatus for the same.
2987	,,	THOMAS BELL, of Plaistow, in the county of Essex.	Improvements in purifying gas.
2989	,,	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in washing and drying machinery and apparatuses.
2990	,,	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in revolving fire-arms.
2991	,,	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in machines for embroidering.
2994	,,	WILLIAM BURGESS, of the firm of Burgess and Key, of Newgate Street, in the city of London, Agricultural Engineers.	Improvements in apparatuses for converting reciprocating into rotary motion.
2966	,,	JOHN KNOWELDEN, of Southwark, in the county of Surrey, Engineer, and RICHARD DOWNES EDWARDS, of Upper Belgrave Place, in the county of Middlesex.	Improvements in hydraulic engines and apparatus connected therewith.
2997	,,	JOHN WALLIS DUNCAN, of Grove End Road, St. John's Wood, in the county of Middlesex, Gentleman.	Improvements in or connected with appliances for transmitting or conducting signals or action by electricity or magnetism, and in the method of testing insulating materials, combinations, or structures for conducting electricity, and in treating malconstructed or invalid electric telegraph cables, and in utilizing parts of certain cables, or the application otherwise of such structures, and in certain insulating compounds, and in the apparatus and machinery used in connection therewith.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2998	31st Dec., 1858.	JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in the permanent way of railways.
2999	„	JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in the manufacture or production of boots and shoes or other coverings for the feet, and in the machinery and apparatus employed in such manufacture.
3000	„	HENRI ROBIN, of Nantes, in the empire of France.	Improvements in reaping machines.
3001	„	MATTHEW DIGBY WYATT, of Guildford Street, Russell Square, in the county of Middlesex, Architect.	Improvements in tiles and tessaræ and other wall coverings, and in the means of securing the same to walls and buildings.
3003	„	JOHN LEES, of Park Bridge, near Ashton-under-Lyne, in the county of Lancaster, Roller Maker, and WILLIAM HEAP, of Ashton-under-Lyne aforesaid, Tool Maker.	Improvements in machinery for punching square holes in the ends of rollers and other articles.
3005	„	FREDERIC WILHELM ALEXANDRE CASPER and GUILLAUME HENRY SCHMAHL, both of No. 152, Rue du Faubourg St. Martin, Paris.	Using spart or Spanish broom in manufacturing seats of all descriptions.
3006	„	LOUIS A. NORMANDY, junior, of 67, Judd Street, London.	A new system of shaft tugs.

A LIST of the LETTERS PATENT for INVENTIONS which have become Void by reason of the Nonpayment of the additional Stamp Duty of £100 before the expiration of the Seventh Year from the date of such Patents, pursuant to the Act of the 16th Vict. c. 5, sec. 2,—for the Quarter ending the 31st day of December, 1861.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2109	2nd Oct., 1854.	THOMAS SHERRIFF, of Glasgow, in the county of Lanark, North Britain, Engineer.	Improvements in moulding or shaping metals.
2118	3rd Oct., 1854.	WILLIAM TATHAM, of Rochdale, in the county of Lancaster, Machine Maker.	Improvements in machinery or apparatus for preparing, spinning, doubling, twisting, and winding cotton, wool, flax, silk, and other fibrous substances.
2123	„	WILLIAM MCNAUGHT, of Rochdale, in the county of Lancaster, Engineer.	Improvements in slide valves for steam engines.
2124	„	CHRISTOPHER NICKELS, of the Albany Road, in the county of Surrey, and JAMES HOBSON, of Leicester.	Improvements in apparatus used when weaving piled fabrics by the aid of wires.
2126	„	THOMAS COOPER, of the Isle of Wight, in the county of Hampshire, Brick Maker.	An improvement in the manufacture and in the mode of joining earthen pipes.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2131	4th Oct., 1854.	William Peel Gaulton, of Cragg Works, near Macclesfield, in the county of Chester, Mechanical Manager.	Improvements in breaks applicable to railway carriages and other vehicles.
2145	5th Oct., 1854.	Thomas Bennett, of Woodbridge Street, Clerkenwell, in the county of Middlesex, Gold and Silver Beater.	Improvements in the apparatus employed in the manufacture of gold, silver, and metal leaf.
2173	11th Oct., 1854.	Pierre Etienne Proust, of Orleans, in the department of Loiret (empire of France), and of 16, Castle Street, Holborn (city), London.	A new system of apparatus for greasing or lubricating axles and other rotating portions of carriages and of machinery.
2186	12th Oct., 1854.	François Alexandre Nicolas Delsarte, Professor, of No. 3, Rue Croix Boissiere, Paris, empire of France.	A new mode of and apparatus for tuning pianos and other kinds of stringed instruments.
2191	13th Oct., 1854.	Charles Frederick Stansbury, of the firm of Nourse and Co., of 17, Cornhill, London, Patent Agents.	Improved apparatus for heating buildings.
2196	14th Oct., 1854.	Anthony Bernhard Baron von Rathen, of Wells Street, in the county of Middlesex.	Improvements in bakers' and confectioners' ovens, and in furnaces or fire places connected therewith, parts of which improvements are applicable also to other ovens, furnaces, and stoves.
2197	„	John Coope Haddan, of Chelsea, in the county of Middlesex, Civil Engineer.	Improvements in the manufacture of cannon, and of projectiles for the same.
2216	17th Oct., 1854.	George Scheutz, of Salisbury Street, in the county of Middlesex, Gentleman, and Edward Scheutz, of the same place, Civil Engineer.	Improvements in machinery or apparatus for calculating and printing the results of such calculations.
2222	„	Jacob Dockray, of Leeds, in the county of York, Machine Maker, and John Dawson, of Holbeck, in the parish of Leeds, in the said county, Machine Maker.	Certain improvements in machinery for raising woollen cloth.
2228	18th Oct., 1854.	Ernst Gessner, of Aue, near Schneeberg, Saxony.	Improvements in gig mills.
2234	19th Oct., 1854.	Robert Walter Winfield, of Birmingham, in the county of Warwick, Merchant and Manufacturer.	An improvement or improvements in tubes and rods used in the construction of articles of metallic furniture.
2236	„	Samuel Mason, Shoe Manufacturer, and William Beeby, Clicker, both of Northampton, in the county of Northampton.	Certain improvements in the manufacture of coverings for the human leg and foot.
2237	„	Peter Armand Le Comte de Fontaine Moreau, of 4, South Street, Finsbury, London, and 39, Rue de l'Echiquier, Paris, Patent Agent.	Improvements in the construction of grates.
2238	„	John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer.	Improvements in machinery or apparatus for making bricks.
2239	„	Thomas Biggart, of Dalry, in the county of Ayr, North Britain, Spinner, and Allan Loudon, of the same place, Mechanic.	Improvements in regulating motive power engines.
2256	23rd Oct., 1854.	John Maddox, of Thomas Street, Brick Lane, Edward Gardner, of Buxton Street, and George Dyer Green, of Weaver Street, all in the county of Middlesex.	Improvements in weaving fringes.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2261	24th Oct., 1854.	CHARLES COWPER, of 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent.	Improvements in preparing to be spun and in spinning silk waste.
2272	25th Oct., 1854.	RICHARD ROBERTS, of the city of Manchester, Engineer.	Improvements in machinery for preparing and spinning cotton and other fibrous substances.
2282	26th Oct., 1854.	JOHN HEALEY, Engineer, and JOHN FOSTER, and JOHN LOWE, Spindle Makers, all of Bolton-le-Moors, in the county of Lancaster.	Improvements in machinery to be used for drawing, moulding, forming, and forging articles in metal.
2289	27th Oct., 1854.	AUGUSTE EDOUARD LORADOUX BELLFORD, of 16, Castle Street, Holborn (city), London, Patent Agent.	An improved mode of operating trip hammers.
2297	28th Oct., 1854.	EDWARD LINDNER, of the city and state of New York, in the United States of America.	Improvements in revolving breech fire-arms and magazine.
2301	„	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent.	Improvements in centrifugal machines, and in driving the same.
2302	30th Oct., 1854.	OLIVER MAGGS, of Bourton, in the county of Dorset, Ironfounder.	Improvements in portable steam engines.
2305	„	JOHN COOPE HADDAN, of Chelsea, in the county of Middlesex, Civil Engineer.	Improvements in projectiles, and machinery for manufacturing the same.
2308	„	ROBERT STIRLING NEWALL, of Gateshead	Improvements in electric telegraphs.
2310	31st Oct., 1854.	THOMAS FREDERICK TYERMAN, of Weymouth Street, Portland Place, in the county of Middlesex, Architect and Surveyor.	Improvements in preparing hoop iron and such like metal surfaces used for bondings in buildings and structures.
2311	„	WILLIAM REID, of University Street -	Improvements in the manufacture of galvanic batteries.
2319	1st Nov., 1854.	GEORGE TAYLOR, of Holbeck, near Leeds, in the county of York.	Certain improvements in mills for grinding corn and other substances.
2320	„	JAMES and WILLIAM BRADSHAW, of Blackburn, in the county of Lancaster, Watch Makers.	Improvements in time pieces.
2332	3rd Nov., 1854.	NATHANIEL TOP, of Farnworth, in the county of Lancaster, Spinner, JOHN HOLT, of the same place, Spinner, and JOHN PARTINGTON, of the same place, Mechanic.	Improvements in hand mules for spinning.
2333	„	ISIDORE ALEXANDRE MOINEAU, Clerk, and JEAN GUSTAVE LEMASSON, Professor of Natural History, of Paris, and of 16, Castle Street, Holborn (city).	Improvements in elastic mattresses and seats.
2361	8th Nov., 1854.	GEORGE DAVIS, of Southampton, in the county of Hampshire; Plumber.	Improvements in taps or cocks.
2373	9th Nov., 1854.	PAUL PRETSCH, of Sydenham, in the county of Surrey, Photographer.	Improvements in producing copper and other plates for printing.
2375	„	DAVID FERRIER, of Edinburgh, in the county of Midlothian, Scotland, Bookseller.	Improvements in facilitating a reference to books.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2382	9th Nov., 1854.	Henry William Harman, of the Dockyard, Northfleet, in the county of Kent, Civil Engineer.	Improvements in windlasses, capstans, crabs, cranes, and other machines or apparatus for raising, lowering, or moving heavy bodies.
2384	,,	George Ross, of Falcon Square, in the city of London, Merchant.	Improvements applicable to the manufacture of articles of caoutchouc or of compositions of which caoutchouc forms a component part.
2394	10th Nov., 1854.	Eugène Rimmel, of 39, Gerrard Street, Soho, in the county of Middlesex, Wholesale Perfumer.	Improvements in combining matters to be employed in coating fabrics and leather, and for other uses in substitution of india rubber.
2399	13th Nov., 1854.	Peter Armand le Comte de Fontaine-Moreau, of 4, South Street, Finsbury, London, and 39, Rue de l'Echiquier, Paris, Patent Agent.	Improvements in fire engines.
2408	14th Nov., 1854.	Lancelot Kirkup, of Orchard Street, Newcastle-on-Tyne, in the county of the same, Mechanical Engineer.	Improvements in anvils.
2423	15th Nov., 1854.	James Buchanan, of Glasgow, in the county of Lanark, North Britain, Gentleman.	Improvements in the manufacture of heddles or healds for weaving.
2425	16th Nov., 1854.	Peter Knowles, of Bolton-le-Moors, in the county of Lancaster, Foreman, and Edward Kirby, of the same place, Traveller.	Improvements in machinery for opening, cleaning, and preparing cotton and other fibrous materials.
2426	,,	Robert Wilson, of Birmingham, in the county of Warwick, Manufacturer.	A new or improved ornamental material or fabric.
2429	,,	Samuel Henton, Saddler, Lambeth, Surrey.	An improved saddle.
2432	,,	William Hann, of Hetton Fence Houses, Durham.	Improvements in propelling vessels.
2433	,,	William Low, of Loft Wen, near Wrexham, in the county of Denbigh.	Improvements in ventilating mines.
2441	17th Nov., 1854.	Charles Asprey, of New Bond Street, in the county of Middlesex, Dressing Case, Dispatch Box, and Writing Case Manufacturer.	Improvements in handles, particularly applicable to dressing cases, dispatch boxes, writing cases, and other similar articles.
2442	,,	George Tomlinson Bousfield, of Sussex Place, Loughborough Road, Brixton.	Improvements in preventing incrustation in steam boilers.
2449	18th Nov., 1854.	Edouard Belmer, of No. 8, Macclesfield Street, City Road, in the county of Middlesex, Engineer.	A new manufacture of apparatus for warming rooms and workshops.
2451	20th Nov., 1854.	Henry Diaper, of Saint Michael's Terrace, Pimlico, in the county of Middlesex, Gentleman.	The application of a new material to the manufacture of paper.
2452	,,	Richard Keefe, of Nock Mills, near Trim, Ireland, Miller.	Improvements in dressing flour.
2459	21st Nov., 1854.	William Beasley, of Smethwick, in the county of Stafford, Manufacturer.	Improvements in the manufacture of gun barrels.
2471	23rd Nov., 1854.	William Aristides Vérel, of Macduff, in the county of Banff, Scotland, Merchant.	Improvements in grinding or pulverizing bones.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2485	24th Nov., 1854.	James Hartley, of Sunderland - -	An improvement in the manufacture of perforated glass.
2491	25th Nov., 1854.	Richard Roberts, of the city of Manchester, Engineer.	Improvements in machinery for preparing cotton and other fibres to be spun.
2496	27th Nov., 1854.	Joseph Gillot, the younger, of Birmingham, in the county of Warwick, Manufacturer, and Henry Gillott, of Birmingham aforesaid, Manufacturer.	An improvement or improvements in metallic pens, and new or improved machinery for the manufacture of metallic pens.
2502	28th Nov., 1854.	John Clarke, of Leicester, in the county of Leicester, Mechanic.	Improvements in the manufacture of looped fabrics.
2503	„	Thomas Restell, of the Strand, in the city of Westminster, Chronometer Maker.	Improvements in umbrellas, parasols, and cases or covers, and walking sticks.
2513	29th Nov., 1854.	John Moore Hyde, of the city and county of Bristol, Iron Ship Builder.	Improvements in iron steam ships, and in boilers and machinery for propelling the same.
2521	30th Nov., 1854.	John Sands, of 11, Austin Friars, in the city of London.	Improvements in the mariner's compass.
2523	„	Frederick Le Mesurier, of Guernsey, Gentleman.	An improvement in the manufacture of ball and shot cartridges.
2528	1st Dec., 1854.	Julian Bernard, of Club Chambers, Regent Street, in the county of Middlesex, Gentleman.	Improvements in the manufacture of boots, shoes, or other protectors for the feet, and in the machinery or apparatus connected therewith.
2542	2nd Dec., 1854.	Joseph Maudslay, of the Westminster Road, Lambeth, in the county of Surrey, Engineer.	An improvement in ordnance.
2557	5th Dec., 1854.	George Fergusson Wilson, Managing Director, and John Chase Craddock, Superintendent of Price's Patent Candle Company, Belmont, Vauxhall.	Improvements in the manufacture of candles and night lights.
2564	6th Dec., 1854.	Albinus Martin, of the city of Westminster, Civil Engineer.	Improvements in the production of indigo dye colours in dyeing and printing textile fabrics and fibrous materials.
2571	7th Dec., 1854.	James Edward McConnell, of Wolverton, in the county of Bucks, Civil Engineer.	Improvements in steam engines.
2585	9th Dec., 1854.	John Thom, of Birkacre, near Chorley, in the county of Lancaster, Calico Printer.	Improvements in apparatus for singeing or firing cotton or other fabrics.
2593	„	Edward Maniere, of Bedford Row -	Improvements in lamps.
2594	„	Nathaniel Johnston, of Bordeaux, at present in Paris, Merchant.	Improvements in arranging buildings and apparatus for breeding, rearing, preserving, and carrying leeches.
2602	11th Dec., 1854.	William James Harvey, of Exeter, Gun Maker.	Improvements in fire-arms when revolving barrels are used.
2604	„	William Grindley Craig, of Gorton, in the county of Lancaster, Engineer.	Improvements in railway axle-boxes and spring fittings.
2605	„	Isaac Dodds, of Sheffield, in the county of York, Engineer.	Certain improvements in machinery or apparatus for working the slide or steam valves of steam engines.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2610	11th Dec., 1854.	Christian Henry Richard Ebert, and Lippman Jacob Levisohn, both of Old Street, St. Lukes, in the county of Middlesex.	Improvements in the mode of rendering certain cases or receptacles extensible.
2624	13th Dec., 1854.	Samuel Fisher, of Birmingham, in the county of Warwick, Engineer.	Certain improvements in ordnance and in machinery and apparatus to be employed in manufacturing the same.
2630	14th Dec., 1854.	James Redgate, of Sneinton, in the county of Nottingham, Lace Manufacturer, James Thornton, of the town of Nottingham, Mechanic, and Edwin Ellis, of Sneinton, in the said county of Nottingham, Lace Manufacturer.	Improvements in machinery for the manufacture of lace and other fabrics.
2632	„	Llewellyn William Evans and James McBryde, of Saint Helen's, in the county of Lancaster, Manufacturing Chemist.	Certain improvements in the burning of sulphuret ores for making sulphuric acid, and for smelting.
2643	15th Dec., 1854.	Luke Turner, of the firm of Hodges and Turner, of Leicester, in the county of Leicester, Manufacturers.	An improvement in weaving elastic fabrics.
2668	18th Dec., 1854.	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of Glasgow, North Britain, Gentleman.	Improvements in the extracting tannic acid from leather, and in preparing the leather for the manufacture of glue.
2671	19th Dec., 1854.	William Porter Dreaper, of Bold Street, Liverpool, in the county of Lancaster, Pianoforte Manufacturer.	The improvement of the manufacture of pianofortes.
2686	20th Dec., 1854.	Richard Whytock, of Edinburgh, and Thomas Preston, of Nottingham.	An improvement in the manufacture of fabrics by twist lace machinery.
2688	„	Robert Walker, of Glasgow, Merchant -	Improvements in telegraphing.
2694	21st Dec., 1854.	Henry Render, of Liverpool, in the county palatine of Lancaster, Gentleman.	Improvements in the manufacture of night lights.
2697	„	Jabez Smith, of Bedford, in the county of Bedford, Silk Mercer.	An improved buckle or fastening.
2710	22nd Dec., 1854.	Felix Marie Baudouin, of Paris, in the empire of France, and of 16, Castle Street, Holborn (city), London.	Improved means of isolating and testing the isolation of the wires of electric telegraphs.
2719	23rd Dec., 1854.	Warren De la Rue, of Bunhill Row, in the county of Middlesex, Manufacturer.	Improvements in treating products arising from the distillation of a certain tar or naphtha, to render the same suitable for dissolving or removing fatty or resinous substances.
2724	26th Dec., 1854.	Frederick Samson Thomas, of Hook's Villa, Fulham, in the county of Middlesex, and William Evans Tilley, of 6, Kirby Street, in the parish of St. Andrew's, Holborn, in the county of Middlesex.	An improved process for plating or coating lead, iron, or other metals with tin, nickel, or alumina.
2741	28th Dec., 1854.	John Gray, of Strand Street, Liverpool -	Improvements in adjusting compasses on board ships or vessels.
2759	30th Dec., 1854.	George Edward Dering, of Lockleys, in the county of Herts.	Improvements in obtaining motive power when using electric currents.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
2760	30th Dec., 1854.	Robert Sam North, of Gorton, near Manchester, in the county of Lancaster, Engineer.	Improvements in switches and crossings for railways.
2761	„	Thomas Slater, of Somers Place West, Saint Pancras, in the county of Middlesex, Optician, and Joseph Tall, of Crawford Street, Marylebone, in the same county, Tool Maker.	Improvements in the construction of planes, and in cutting apparatus, and in the machinery or apparatus employed therein.
2763	„	Bernard Hughes, of 3½, Donegal Place, Belfast, Ireland.	The better and more effectual heating of bakers' ovens.

FOREIGN PATENTS.



FRANCE.

CURRENT LIST of PATENTS of Invention and Certificates of Addition.

1861.

(*Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.*)

NOTE.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

50,824. DE FRANCY, of Ancenis, for "Manufacture of lime."—Dated 26th August, 1861.

50,825. GABERT, of Cognac, for "A machine for the manufacture of covers for bottles."—Dated 27th August, 1861.

50,826. HAMEL, represented by Girard, of 96, Rue de Bondy, Paris, for "A loom."—Dated 13th August, 1861.

50,827. HENNINOT, of Caudry, for "Scissors for cutting bordered lace designs."—Dated 26th August, 1861.

50,828. HENRICHS, of 15, Rue de la Victoire, Paris, for "A toy or gas kite or balloon."—Dated 14th August, 1861.

50,829. HUTTON and Co., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Mounting umbrellas, parasols, &c."—Dated 13th August, 1861.

50,830. INNOCENT, of 3, Rue du Faubourg Poissonnière, Paris, for "Silicious bitumen."—Dated 13th August, 1861.

50,831. JOZANSI, of Saint Romain de Bonet, for "A surgical instrument, called 'Vaginal irrigator,' with a double current, &c."—Dated 24th August, 1861.

50,832. LAFFAS, of 36, Rue de la Paix, Paris, for "Improvements in apparatus for heating and vaporizing liquids."—Dated 14th August, 1861.

50,833. LARA and DU REU, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in presses for compressing all kinds of substances, and especially peat."—Dated 13th August, 1861.

50,834. LAROCHE and LACROIX, of la Couronne, for "Rollers with parallel threads, being a substitute for thick wove canvass used in the manufacture of paper."—Dated 23rd August, 1861.

* For the French Patent Law see No. 228 of this Journal.

50,835. LAVILLE, PETIT, and CRESPIN, of 8, Rue Simon le Franc, Paris, for "A machine for the manufacture of hats of Flemish felt."—Dated 14th August, 1861.

50,836. LE BOSQUAIN and MARY, of 29, Rue de Malte, and 117, Faubourg St. Antoine, Paris, for "A rotary seal for dry and wet stamps."—Dated 14th August, 1861.

50,837. LELONG and BISCOP, domiciled with Dubrulle, of Hergnies, for "A rocking berlin for the conveyance of coal."—Dated 28th August, 1861.

50,838. LEMUT and DUMÉNY, of Saint Dizier, for "A puddling machine."—Dated 24th August, 1861.

50,839. MAISSIAT, of the Ecole de Médecine, Paris, for "Improvements in fire-arms."—Dated 13th August, 1861.

50,840. MARTIN and JEANTET, domiciled with Feuillat, 18, Rue Ferrandière, Lyon, for "An hydraulic receiver."—Dated 21st August, 1661.

50,841. MÉGUEULE, of Roubaix, for "Reeds of cards."—Dated 26th August, 1861.

50,842. MEUGNIOT, of Dijon, for "A double plough."—Dated 22nd August, 1861.

50,843. MIGNOT, of 17, Rue du Grand Saint Michel, for "Mastic of all colours, called 'Disaggregated vegeto-mineral mastic,' manufacture of objects to which it may be applied, and processes of manufacturing said objects."—Dated 14th August, 1861.

50,844. POUPON-REYVON, represented by Montenoise, of 2, Rue de la Madeline, Besançon, for "A self-acting mirror for catching larks."—Dated 27th August, 1861.

50,845. ROUARD, of 4, Rue Saint Sépulcre, Marseille, for "An aquatic and aerial motor."—Dated 24th August, 1861.

50,846. ROUENT, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Improvements in square lanterns for the house."—Dated 12th August, 1861.

50,847. TAUTAIN, of 10, Rue Amédée, Paris, for "A parachute with a car."—Dated 13th August, 1861.

50,848. TOUGARD, of Canteleu, for "A condensor or cooler with a large surface."—Dated 24th August, 1861.

50,849. ASHLEY, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Chairs with skates, or improved sledges."—Dated 16th August, 1861.—(English Patent, 23rd March, 1861.)

50,850. BEDOUIN and BERTRAND, of 40, Rue St. Laurent, Salon, for "A machine for pumicing felt hats."—Dated 27th August, 1861.

50,851. BÉRENGUIER, domiciled with Roche, of 7, Rue Beauveau, Marseille, for "A double-action pump without clack valves."—Dated 28th August, 1886.

50,852. BLOODGOOD, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in machines for drawing and spinning wool and other fibrous substances."—Dated 14th August, 1861.

50,853. Boisgard, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the manufacture of toilet water, called 'Indian elixir.'"—Dated 12th August, 1861.

50,854. Bonniveau, domiciled with Bonnot, of 6, Rue du Pont-aux-Choux, Paris, for "A pump."—Dated 17th August, 1861.

50,855. Caire, of 20, Rue Sanctuaire-du-Fort-Notre-Dame, Marseille, for "A syphon for purifying water, without using filters or pressure."—Dated 27th August, 1861.

50,856. Caroly, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in axles of carriages, and in all kinds of axles and revolving arbors."—Dated 16th August, 1861.

50,857. Chelley, of Mulhouse, for "A chemical compound called 'Dye of iodine.'"—Dated 26th August, 1861.

50,858. Daix, of 82, Rue des Poissonniers, Paris, for "A furnace with a double hole, and with alternate fire-places, for reheating iron, steel, &c."—Dated 17th August, 1861.

50,859. Darau, of Saramon, for "A scythe for cutting corn and for gathering it into sheaves by means of a rake with a single branch applied to said instrument."—Dated 26th August, 1861.

50,860. Duclos, of 113, Boulevart Longchamp, Marseille, for "A regulator of steam engines."—Dated 27th August, 1861.

50,861. Enjalric, of 62, Rue de la Montagne Sainte Geneviéve, Paris, for "A sieving apparatus for separating fecal matter in privies."—Dated 15th August, 1861.

50,862. Escoffier, of Cognac, for "Carriage boxes with front and back screws."—Dated 28th August, 1861.

50,863. Février-Nozo, of Saint Quentin, for "An apparatus for preserving plums in brandy."—Dated 29th August, 1861.

50,864. Flusin, domiciled with Roche, of 7, Rue Beauveau, Marseille, for "A continuous pump with two barrels and without a clack-valve."—Dated 28th August, 1861.

50,865. Gee, represented by Ansart, of 33, Boulevart Saint Martin, Paris, for "A composition of substances obtained from the waste, residue, cuttings, &c. of leather, and from old leather, and application of said substances to the manufacture of useful and fancy objects."—Dated 7th August, 1861.—(English Patent, 6th February, 1861.)

50,866. Halphen, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A steam horse gin with a multiple transmission."—Dated 17th August, 1861.

50,867. Hermann-Lachapelle and Glover, represented by Ansart, of 33, Boulevart Saint-Martin, Paris, for "A self-acting sewing machine."—Dated 16th August, 1861.

50,868. Hermann-Lachapelle and Glover, represented by Ansart, of 33, Boulevart Saint-Martin, Paris, for "An apparatus for pulverizing liquids."—Dated 17th August, 1861.

50,869. Lagardere, of Dax, for "Swivel windows."—Dated 28th August, 1861.

50,870. Mathieu and Bertrand, represented by Chassaigne, of 18, Rue Saint-Fiacre, Paris, for "Modifications in the manufacture of thread gimp."—Dated 17th August, 1861.

50,871. Mauduit, of 29, Rue Mondétour, Paris, for "Improvements in the manufacture of locks."—Dated 14th August, 1861.

50,872. Montandon, Brothers, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in the manufacture of springs."—Dated 16th August, 1861.

50,873. Nussey, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in machines for combing wool, silk, and other similar substances."—Dated 16th August, 1861.—(English Patent, 16th February, 1861.)

50,874. Paulet, Sons, and Courtois, of 35, Rue Saint Ambroise, Paris, for "A process for disinfecting putrid matter."—Dated 16th August, 1861.

50,875. Picard, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A process for extracting a ligneous product called 'Vegetable wool from hops.'"—Dated 17th August, 1861.

50,876. Quillet, Father and Sons, represented by Bresson, of 51, Rue de Malte, Paris, for "Improvements in preparing alimentary substances."—Dated 17th August, 1861.

50,877. Regnaut and Fournet, of 398, Rue Saint Honoré, and 36, Rue Phélippeaux, Paris, for "Applying microscopic photographs to precious and other stones."—Dated 16th August, 1861.

50,878. De Ste. Marie, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A machine for marking metallic capsules."—Dated 14th August, 1861.

50,879. Thomas, 1, Rue de l'Epaisse Muraille, Metz for "Mechanical brushes for blacking foot coverings, for washing and dry-rubbing floors."—Dated 28th August, 1861.

50,880. Vigoureux, of Reims, for "A system of spinning applied to mixed thread of various colours."—Dated 27th August, 1861.

50,881. Badoil and Revel, domiciled with Feuillat, 18, Rue Ferrandière, Lyon, for "A machine for embroidering all kinds of tissues."—Dated 27th August, 1861.

50,882. Basset, of 4, Rue de la Vieille Poterie, Orléans, for "A machine for obtaining festoons."—Dated 31st August, 1861.

50,883. Bounon, of Auxerre, for "A hammer for setting millstones."—Dated 30th August, 1861.

50,884. Bouvier, Brothers, of Vienna, for "A moveable table for longitudinal shearing machines."—Dated 29th August, 1861.

50,885. Brunet, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "A beverage."—Dated 17th August, 1861.

50,886. Capelle, represented by Ansart, of 33, Boulevart Saint Martin, Paris, for "A pump with a fan piston."—Dated 19th August, 1861.

50,887. Clément, of 10, Petite Rue St. Denis, Paris, for "Manufacture of bricks with rebates."—Dated 20th August, 1861.

50,888. Coignard, of Chateau-Gontier, for "A machine for cutting canvas."—Dated 29th August, 1861.

50,889. Coles, of Hôtel du Rhin, Place Vendôme, for "A system of fire-arms."—Dated 11th July, 1861.

50,890. Coutard, represented by Marçais, of 132, Rue de Rivoli, Paris, for "Improvements in injecting apparatus of steam engines."—Dated 20th August, 1861.

50,891. Degivry, of 13, Rue Romarin, Lyon, for "A jointed umbrella."—Dated 30th August, 1861.

50,892. Desnos, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "Smoking pipes and narguilés."—Dated 20th August, 1861.

50,893. Dietz, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A machine for planing wood on four sides at once."—Dated 19th August, 1861.

50,894. Dumas and Benoit, of Privas, for "An apparatus called 'Fluorescent lamp for illuminating mines,' &c."—Dated 29th August, 1861.

50,895. Emerson, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "Mounting tools with handles, such as pickaxes and hammers."—Dated 3rd August, 1861.

50,896. Fromant and Vollmer, of 27, Rue Paillot Montabert, and 54, Rue des Bois, Troyes, for "A machine for taking in meshes, applicable to French stocking frames."—Dated 31st August, 1861.

50,897. Heislé, of Schelestadt, for "A press for grapes, oleaginous seeds, tallow, &c."—Dated 2nd September, 1861.

70,898. Hugla, of 40, Rue des Herbes, Bordeaux, for "Slate coverings."—Dated 14th March, 1861.

50,899. Janson, of Tarare, for "An embroidering machine and comb for tambouring."—Dated 29th August, 1861.

50,900. Lequeux, of 1, Avenue de la Santé, Paris, for "A toy."—Dated 20th August, 1861.

50,901. Luthringer, of 90, Faubourg de Bresse, Caluire, for "A yellow colouring substance called 'Azotilein."—Dated 30th August, 1861.

50,902. Maréchal, of Metz, for "Improvements in the manufacture of stained windows."—Dated 30th August, 1861.

50,903. Marion, of Casamène, Besançon, for "A machine for the manufacture of pins or pegs."—Dated 30th August, 1861.

50,904. Marzo, represented by Ricordeau, of 25, Boulevart de Strasbourg, Paris, for "Improvements in the construction of railways."—Dated 19th August, 1861.

50,905. Meyer and Bourguignon, represented by Brade, of 29, Rue Ste. Anne, Paris, for "A composition of mastic for coating walls, water reservoirs, vessels containing acids, &c."—Dated 21st August, 1861.

50,906. Persus, of 47, Rue de Seine, Paris, for "A photometric frame."—Dated 20th August, 1861.

50,907. Plantier and Mrs. Guillebout, of 33, Rue d'Argenteuil, and 32, Rue de Lyon, Paris, for "Propellers with hinged fins, applicable to all kinds of vessels and balloons, &c."—Dated 13th July, 1861.

50,908. Pouget, represented by Amouroux, of 333, Rue Saint Martin, Paris, for "A pneumatic irrigator."—Dated 19th August, 1861.

50,909. Raphael, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kind of chairs, benches, &c."—Dated 19th August, 1861.

50,910. Sicard, of 64, Rue Grignon, Marseille, for "An apparatus for cleaning, measuring, and weighing corn and oil seeds."—Dated 28th August, 1861.

50,911. Vigouléte, of Agen, for "Artificial coal."—Dated 29th August, 1861.

50,912. Vincenzi, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A signal apparatus for preventing railway collisions."—Dated 20th August, 1861.

50,913. Viret, of 16, Rue de la Quarantaine, Lyon, for "A machine for washing and dyeing textile substances in skeins."—Dated 30th August, 1861.

50,914. Arnould, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "Mounting tubes for gauging water."—Dated 22nd August, 1861.

50,915. Bail, of Villers-Bretonneaux, for "A machine for the manufacture of Scotch stockings."—Dated 31st August, 1861.

50,916. Bazin, Brothers, of Sourdeval la Barre, for "Manufacture of boxes of cast locks."—Dated 31st August, 1861.

50,917. Bergez, of Rue Pradier, Paris, for "A toy."—Dated 21st August, 1861.

50,918. Bernadot, represented by Amade, of 22, Rue de la Poterie, Paris, for "Fire-arms without cocks or fire-lock, with an interior percussion, loaded by the breech by means of a fork that rises and lowers on the cartridge, primed and unprimed by a single motion forward and backwards of the trigger."—Dated 21st August, 1861.

50,919. Braham, represented by Cobbè, of 13, Rue du Cherche Midi, Paris, for "Improvements in spectacles and eye glasses, and in their cases."—Dated 22nd August, 1861.—(English Patent, 16th February, 1861.)

50,920. Cerfontaine and Co., represented by Bonneville, of 39, Rne de l'Echiquier, Paris, for "A machine for the manufacture of hollow balls from coal dust."—Dated 22nd August, 1861.

50,921. Cleuet, of 182, Rue d'Allemagne, Paris, for "A self-acting feeding float."—Dated 22nd August, 1861.

50,922. Colin and Camand, of Grenoble, for "Cutting gloves."—Dated 4th September, 1861.

50,923. Delphin-Joveneaux, domiciled with Ernest Delattre, Rue Royale, Lille, for "A moveable fire-place for heating bread ovens."—Dated 4th September, 1861.

50,924. Evans, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of wheels of railway carriages and of other wheels."—Dated 22nd August, 1861.—(English Patent, 21st February, 1861.)

50,925. François, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Manufacture of plated forks and spoons."—Dated 21st August, 1861.

50,926. Gautrot, of Saint Dié, for "Castors for bedsteads and other furniture."—Dated 2nd September, 1861.

50,927. Gerbenne, of 140, Rue de la Roquette, Paris, for "A smoke consuming fireplace of steam boilers."—Dated 22nd August, 1861.

50,928. Ginier, of 21, Rue de Hanovre, Paris, for "An apparatus for centring the joists of floors."—Dated 22nd August, 1861.

50,929. Iverneau, of 13, Quai de la Tournelle, Paris, for "Manufacture of various kinds of bricks."—Dated 21st August, 1861.

50,930. Jaillon, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Photographic clocks."—Dated 21st August, 1861.

50,931. Janvier, represented by Marchant, of 17, Rue de Buffault, Paris, for "Fastenings of gloves."—Dated 21st August, 1861.

50,932. Le Bas, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Bread making and simultaneous manufacture of starch."—Dated 22nd August, 1861.

50,933. Marie, of 8, Boulevart de l'Hôpital, Paris, for "A press."—Dated 22nd August, 1861.

50,934. Martin and Magnin, of 20, Rue de Grenelle St. Honoré, and 163 and 165, Rue St. Antoine, Paris, for "A toy."—Dated 22nd August, 1861.

50,935. Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in purifying the products obtained in charring wood."—Dated 22nd August, 1861.

50,936. Molin, represented by Brade, of 29, Rue Ste. Anne, Paris, for "An electro-magnetic motor."—Dated 22nd August, 1861.

50,937. Mullier, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in looms."—Dated 21st August, 1861.

50,938. Muriel and Plessis, of Mellé, for "A soap cutter."—Dated 31st August, 1861.

50,939. Poivret, of 25, Rue du Palais de Justice, Troyes, for "An apparatus for consuming smoke worked by gas or by any other combustible liquid."—Dated 4th September, 1861.

50,940. Reeves, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in magneto-electric motors."—Dated 22nd August, 1861.—(English Patent, 22nd February, 1861.)

50,941. De Riols and De Fonclare, of 42, Allée, Louis Napoleon, Toulouse, for "Manufacture of moulded bottles."—Dated 30th August, 1861.

50,942. Rouchaud, of 66, Rue Notre Dame, Bordeaux, for "Boxes for keeping preserved food."—Dated 3rd September, 1861.

50,943. Rousselot and Company, of 2 and 4, Rue de la Cour-de-Noue, Paris, for "Separating metals obtained by the dry or wet process, converting the same into salts, and apparatus for decanting acids in close vessels at a distance and without steam."—Dated 22nd August, 1861.

50,944. Rousselot and Company, of 2 and 4, Rue de la Cour-de-Noue, Paris, for "Converting iron into cast steel called 'solid steel,' and for giving metals a greater hardness."—Dated 22nd August, 1861.

50,945. Vergnol and Vivent, domiciled with Dupac, of 19, Rue Gouvion, Bordeaux, for "A mode of ioduretting and chloruretting photographic paper."—Dated 4th September, 1861.

50,946. Watrin, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "A machine for tilling and clearing lands."—Dated 22nd August, 1861.

50,947. Brown, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in apparatus for lubricating or greasing the interior of barrels of fire-arms in general."—Dated 23rd August, 1861.—(English Patent, 26th April, 1861.)

50,948. Carpentier, of 40, Rue des Marais St. Martin, Paris, for "Applying crucibles of refractory clay or others to galvanizing, tinning, and leading wrought and cast iron."—Dated 24th August, 1861.

50,949. Charrière, of 6, Rue de l'Ecole de Médecine, Paris, for "Means of fastening and jointing articles of cutlery."—Dated 22nd August, 1861.

50,950. Chaudré, of 39, Rue Moreau, Paris, for "A machine for compressing air, called 'Generator.'"—Dated 24th August, 1861.

50,951. Chauvel, of St. Germain-de-Navarre, Evreux, for "Punching metals, especially in the manufacture of small round objects."—Dated 6th September, 1861.

50,952. Chéron, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "An inalterable twyer with interior regulators."—Dated 24th August, 1861.

50,953. Colas, Brothers, and Jeannin, represented by Thirion, of 95, Boulevart Beaumarchais, Paris, for "A machine for the manufacture of iron bars for grates."—Dated 24th August, 1861.

50,954. Coquet, of 5, Rue des Olivettes, Nantes, for "A thrashing machine with a direct action."—Dated 5th September, 1861.

50,955. Daumont, represented by Dreyfous, of 22, Rue de Bondy, Paris, for "Improvements in umbrellas called 'Captives.'"—Dated 24th August, 1861.

50,956. Davenport and Cole, represented by Perpigna, of 13, Rue du Cherche-Midi, Paris, for "Improvements in the manufacture of penholders, pencil-cases, and brushes for painting."—Dated 23rd August, 1861.—(English Patent, 9th March, 1861.)

50,957. Desbordes and Roudault, of 13, Rue de Vendôme, Paris, for "Improvements in the construction of metal barometers and thermometers."—Dated 21st August, 1861.

50,958. Dorgal and Guesné, represented by Le Blanc, of Rue Sainte-Appoline, Paris, for "Combining organs with pianos."—Dated 26th August, 1861.

50,959. Dubois and Casse, of 17, Rue du Grand-Saint-Michel, Paris, for "An instrument for mea-

suring the pressure of electric fluids."—Dated 27th August, 1861.

50,960. Duval and Blanchard, of 42, Rue Laffite, Paris, for "A process for filtering and disinfecting fecal matter."—Dated 26th August, 1861.

50,961. Emmanuel, of 6, Avenue des Arts, Levallois, for "A mechanism called 'Mechanical pendulum."—Dated 23rd August, 1861.

50,962. Farcot, of 39, Rue des Trois Bornes, Paris, for "An alarum."—Dated 24th August, 1861.

50,963. Fleury, represented by Charlot, of 5, Rue de Montmoreney, Paris, for "A process for preserving liquids in general."—Dated 23rd August, 1861.

50,964. Ganne, of Cour-Cheverny, for "A rubbing machine."—Dated 6th September, 1861.

50,965. Hoorickx and Lekieffre, represented by Charlot, of 5, Rue de Montmorency, Paris, for "Composition of economical manure for destroying insects, mollusks, reptiles, and other organs noxious to man or animals."—Dated 23rd August, 1861.

50,966. Keun, jun., of Thann, for "A centrifugal flyer with hollow holders."—Dated 2nd September, 1861.

50,967. Le Baron, of 44, Rue St. Georges, Paris, for "Improvements in the manufacture of wheels in general."—Dated 26th August, 1861.

50,968. Marotte and Bocquet, domiciled with Jusselain, Saint Pierre, Martinique, for "Improvements in the treatment of sugar juice of plants, especially for the manufacture of sugar."—Dated 24th June, 1861.

50,969. Moison and Moriceau, domiciled with Védé, 148, Rue du Temple, Paris, for "Improvements in apparatus for the extraction of beetroot juice."—Dated 26th August, 1861.

50,970. Noley and Guer, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A rack candlestick."—Dated 23rd August, 1861.

50,971. Paupardin, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "An apparatus for cambering and glueing the heels of foot-coverings."—Dated 23rd August, 1861.

50,972. Picherie, of 2, Quai Brancas, Nantes, for "Improvements in ploughs."—Dated 4th September, 1861.

50,973. Quétel-Trénois, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in machines for working wood for floors, &c."—Dated 24th August, 1861.

50,974. Robinson and Spencer, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in the manufacture of pottery and other plastic articles."—Dated 24th August, 1861.—(English Patent, 23rd February, 1861.)

50,975. Seynave, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A culinary apparatus for the simultaneous manufacture of gas."—Dated 24th August, 1861.

50,976. Van Speybrouch, of 43, Passage du Saumon, Paris, for "Manufacture of fruit sugar plums."—Dated 23rd August, 1861.

50,977. Vouillon, represented by Ricordeau, of 23 Boulevart de Strasbourg, Paris, for "Applying electricity to preparing wool and other filamentous substances."—Dated 23rd August, 1861.

50,978. Wallart, of 1 and 3, Place des Petits-Pères, Paris, for "An instrument for the toilet called 'hydro-soli-fiole."—Dated 27th August, 1861.

50,979. Wilson, represented by Ansart, of 33, Boulevart Saint Martin, Paris, for "Improvements in means or apparatus for sawing wood."—Dated 27th August, 1861.—(English Patent, 28th February, 1861).

Certificates of Addition.

32,261. Alexandre, for "Portable organs."—Dated 20th July, 1861.

50,370. Belloir and Company, for "Seats, chairs, arm-chairs, divans."—Dated 25th July, 1861.

47,910. De Bériot, for "Mechanical bedsteads."—Dated 25th July, 1861.

49,615. Chouippe, for "A microscope."—Dated 26th July, 1861.

40,441. Corbin, for "A motor."—Dated 27th July, 1861.

46,520. Couillet, for "Seamless foot coverings."—Dated 26th July, 1861.

46,239. Creton, for "Windows with covered conduits."—Dated 30th July, 1861.

43,069. Dujardin, for "A printing telegraph."—Dated 1st August, 1860.

40,302. Dumesnil, for "Lubricating grease."—Dated 26th July, 1861.

42,286. Durand and Pradel, for "A Jacquart loom."—Dated 19th July, 1861.

49,177. Eudes, for "A suction and watering broom."—Dated 27th July, 1861.

46,144. Fondeur, for "A plough with alternate socks."—Dated 2nd August, 1861.

49,679. Fouquet, for "A clasp-buckle."—Dated 26th July, 1861.

48,223. Galabrun, for "Moulding candles."—Dated 25th July, 1861.

47,327. Gannal, for "Bitumen roads."—Dated 26th July, 1861.

48,136. Guyard, for "Controlling carriages."—Dated 25th July, 1861.

46,054. Haussmann, for "Ice."—Dated 24th July, 1861.

50,288. Hayem, for "Combined cravat, collar, and shirt."—Dated 25th July, 1861.

49,431. Klotz, for "Ornamenting paper, &c."—Dated 22nd July, 1861.

46,884. Lacroix, for "Ceramics."—Dated 27th July, 1861.

37,328. L'Alliance, for "Magneto-electric machines."—Dated 25th July, 1861.

46,770. Lambert, for "A pump."—Dated 17th July, 1861.

45,770. Lambert, for "A pump."—Dated 25th July, 1861.

49,271. Lamy, for "Gilding porcelain."—Dated 24th July, 1861.

31,715. Lapointe and Company, for "Empyting cesspools."—Dated 26th July, 1861.

44,965. Laurency, Brothers, for "Nets for scaffoldings."—Dated 18th July, 1861.

45,994, Leclaire, for "A steelyard with manifold arms."—Dated 18th July, 1861.

47,525. Lis, for "Finishing woollen stuffs."—Dated 27th July, 1861.

46,062. Malois, for "Heels of foot-coverings."—Dated 22nd July, 1861.

46,121. Marié-Davy, for "A counter worked by pressure."—Dated 26th July, 1861.

46,983. Martin-Vial, for "A clasp."—Dated 26th July, 1861.

30,642. Mauger, for "Polishing forks and spoons."—Dated 23rd July, 1861.

41,881. Migeot de Baran, for "Stoppering syphons."—Dated 27th July, 1861.

46,699. Pasquay, Brothers, and Company, for "Steam apparatus."—Dated 31st July, 1861.

50,265. Robert and Company, for "A tallow injector."—Dated 20th July, 1861.

47,810. Schottlander, for "A photographic fan-album."—Dated 25 July, 1861.

46,860. Stainthorp, for "Moulded candle."—Dated 27th July, 1861.

49,478. Tambour, for "Ternary seams for gloves."—Dated 23rd July, 1861.

48,942. Thurel, for "Fastenings of foot-coverings, gloves, &c."—Dated 22nd July, 1861.

44,212. Verdat du Trembley and Martin, for "A pneumatic break."—Dated 31st July, 1861.

47,667. Baril, for "Antifriction."—Dated 14th August, 1861.

45,588. Baudrit, for "A lock."—Dated 29th July, 1861.

29,437. Boboeuf, for "Rectifying mineral oils."—Dated 29th July, 1861.

48,918. Brudenne, for "Fat acids."—Dated 30th July, 1861.

46,234. Castel, for "A fire-place of locomotives."—Dated 10th August, 1861.

41,392. Chesneau, for "A paddle propeller and hydraulic wheel."—Dated 3rd August, 1861.

46,363. Chevillard, for "Motive wheels superseding pistons."—Dated 19th August, 1861.

46,397. Couissinier, for "Bricks of baked clay."—Dated 9th August, 1861.

36,766. Cousin, for "Cosmography."—Dated 25th June, 1861.

47,996. Cuche, for "A hot-air motor."—Dated 19th August, 1861.

46,819. Drapeau, for "A hand mill."—Dated 13th August, 1861.

46, 556. Dubral, for "A loom."—Dated 29th July, 1861.

50,249. Durand and Crozet, for "A tambour frame for making ribbon."—Dated 13th August, 1861.

49,149. Fléchet, for "A chronometer."—Dated 1st August, 1861.

45,050. Franck and Company, for "Gauze wire with meshes."—Dated 10th August, 1861.

37,322. Gombeau and Royer, for "A mill for grinding barley for breweries."—Dated 27th July, 1861.

46,752. Gratrix and Paraf-Javal, for "Impression on fabrics."—Dated 1st August, 1861.

50,155. Grobon and Foucher, for "Pallet for water colours.—Dated 31st July, 1861.

47,042. Grouselle and Anthoine, for "An umbrella."—Dated 30th July, 1861.

40,100. Guigues, for "A double action filter."—Dated 14th August, 1861.

46,213. Jaubert, for "Trusses."—Dated 8th August, 1861.

46,344. Journaux, for "A sewing machine."—Dated 30th July, 1861.

49,369. De La Tour-du-Breuil, for "A copying press."—Dated 29th July, 1861.

38,005. Laumonnier, for "Stoppering syphons."—Dated 30th July, 1861.

48,557. Le Roux, for "Application of caoutchouc to shirts."—Dated 14th August, 1861.

41,819. Magnin, for "A sewing and embroidering machine."—Dated 8th August, 1861.

38,335. Marie, for "A hot-air stove and chimney."—Dated 1st August, 1861.

46,410. Minié, for "Fire-arms."—Dated 1st August, 1861.

46,255. Monnier, for "Harness of looms."—Dated 10th August, 1861.

46,797. Pailley, for "A belt saw."—Dated 30th July, 1861.

46,446. Pialoux, for "A winnowing machine."—Dated 16th August, 1861.

50,136. Ratignez, for "Cords."—Dated 7th August, 1861.

42,303. Renard, for "Application of mica."—Dated 27th July, 1861.

42,303. Renard, for "Application of mica."—Dated 1st August, 1861.

48,340. Ripouteau, for "Coffee."—Dated 6th August, 1861.

50,364. Sénéchal, for "Piston stoppers."—Dated 3rd August, 1861.

50,431. Sloan, for "Lace looms."—Dated 31st July, 1861.

49,134. Thierry, for "A steam engine worked by superheated steam."—Dated 31st July, 1861.

46,515. Albert, for "Railway sleepers."—Dated 22nd August, 1861.

47,667. Baril, for "Anti-friction."—Dated 19th August, 1861.

48,121. Berger, for "A turbine."—Dated 26th August, 1861.

39,766. Borderie, for "A mechanical carriage."—Dated 8th August, 1861.

42,183. Cart, for "Moveable saw mills."—Dated 14th August, 1861.

44,860. Cresson, for "A sowing machine."—Dated 24th August, 1861.
46,365. Dedieu, for "Squares." — Dated 22nd August, 1861.
46,206. Delarue, for "A game."— Dated 7th August, 1861
42,551. Descoutures, for "Breech-loading fire-arms."—Dated 13th August, 1861.
50,249. Durand and Crozet, for "A tambour loom for the manufacture of ribbon."—Dated 21st August, 1861.
42,286. Durand and Pradel, for "A Jacquart loom."—Dated 12th August, 1861.
46,917. Guidotti, for "A penholder." — Dated 10th August, 1861.
47,329. Halphen and Co., for "Metal forks and spoons."—Dated 14th August, 1861.
50,194. Hennart, for "A fire-grate."—Dated 24th August, 1861.
43,374. Hermann, Lachapelle, and Glover, for "Gaseous water."—Dated 14th August, 1861.
42,003. Hervy and Charles, for "An instrument for measuring."—Dated 24th August 1861.
48,748. Imme, for "A friction apparatus."—Dated 10th August, 1861.
46,344. Journaux, for "A sewing machine."—Dated 7th August, 1861.
48,367. Lair, for "Vinegar, and sweetening wine." —Dated 8th August, 1861.
40,368. Laplanche, for "Gutta-percha and leather foot-coverings."—Dated 14th August, 1861.
46,408. Laumondais, for "Machine for the treatment of hemp and flax."—Dated 24th August, 1861.
49,747. Liézard, for "An apparatus for decanting bottles on the dinner table."—Dated 9th August, 1861.
45,122. Logette, for "Clasps for stoppering sparkling wine."—Dated 20th August, 1861.
41,881. Migeot de Baran, for "Stoppering syphons."—Dated 8th August, 1861.
49,001. Morel, for "A lock."—Dated 12th August, 1861.
43,954. Morot, for "An electro-magnetic motor." —Dated 24th August, 1861.
48,786. Noïrot, for "Caoutchouc tubes."—Dated 13th August, 1861.
46,320. Planchon, for "Drawing off liquids."—Dated 16th August, 1861.
45,126. Polton, for "Manure."—Dated 10th August, 1861.
49,100. Royer, for "A ruling machine."—Dated 10th August, 1861.
37,524. Sautou, for "A screw tow-boat."—Dated 14th August, 1861.
49,799. Schloss and Nephew, for "A photographic album."—Dated 9th August, 1861
48,277, Thier, for "Propulsion." — Dated 8th August, 1861.
46,292. Torres, for "Advertizing."—Dated 10th August, 1861.
46,294. Troost, for "Naphthaline."—Dated 7th August, 1861.
47,988. Vendrand, for "A jointing plane with a regulator."—Dated 7th August, 1861.
42,858. Vion, for "Iron blinds and Venetian blinds."—Dated 14th August, 1861.
47,191. Wogler, for "Screw-rings and hooks of cupboards."—Dated 10th August, 1861.

List of Specifications published during the week ending 25th January, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
1502	7*d.*	Gedge, W. E.——(*A communication from V. E. D. Duchataux.*)—Reaping and mowing machine.
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1505	10*d.*	Mason, H.—Preparing and spinning cotton, &c.
1506	3*d.*	Pètre, L. J. J.— Smoke-consuming grate.
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1508	3*d.*	Drew, J.—Shields for floating batteries, &c.
1509	3*d.*	Cox, G.—Floor-dog or cramp.
1510	4*d.*	Napier, J.—Stereotyping.
1511	11*d.*	Walmsley, D., and Rostron, J.—Stopping hoisting machinery.
1512	10*d.*	Jobson, R., and Varley, C. F.—Posts or supports for telegraph wires.
1513	3*d.*	Girard, J. P.—Coffee mill.
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1515	3*d.*	Gedge, W. E.—(*A communication from M. Girrés.*)—Beating apparatus for picking and cleaning materials for textile fabrics.
1516	3*d.*	Chatonet, E., junior.—Covers for tin or other metal cases.
1517	3*d.*	Holland, H.—Umbrellas and parasols.
1518	10*d.*	Knowles, J.—Preparing cotton, &c.
1519	7*d.*	Bing, E.—Window sashes.
1520	1*s.* 4*d.*	Illingworth, J. — Arranging sizing houses, brew houses, &c.
1521	10*d.*	Gregory, F.—Cutting hay, chaff, &c.
1522	6*d.*	Cook, S., and Hacking, W. H.—Plaiting or folding woven fabrics.
1523	6*d.*	Duncombe, Hon. C.—Sawing wood. &c.
1524	9*d.*	Blackburn, B.—Lubricating locomotive and other axletrees.
1525	2*s.* 3*d.*	Downing, T. M.—Corks and bungs.
1526	6*d.*	Bayliss, W.—Chain harrows.
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1528	10*d.*	Summerscales, J., and Mason, M.—Gas singeing apparatus.
1529	3*d.*	Leeming, J.—Steam boilers, furnaces, and flues.
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1531	1*s.* 1*d.*	Langlade, P. — Tapestry and other weavings.
1532	6*d.*	Wedlake, T. W.— Hay-making machines.
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1535	9*d.*	Pitfield, R. W.—Self-acting mules.
1536	3*d.*	Knowles, T., Aldred, P., and Haworth, J.—Raising serrated surfaces on rollers.
1537	3*d.*	Barnwell, S., junior.—Fringes.
1538	10*d.*	Grant, S.— Breech-loading fire-arms and fowling-pieces.

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B. WOODCROFT.

Great Seal Patent Office,
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No. 843. FRIDAY, JANUARY 31, 1862. Price 2d.

Applications for Letters Patent.

(*28th, 29th, and 30th January*, 1862.)

213. James List, of Carisbroke, Isle of Wight, county of Hampshire, England, for an invention of "Obtaining distances and heights and distances between distant objects without computation."—Dated 28th January, 1862.

214. Henry Hughes Treppass, of 14, St. George's Terrace, Barnsbury Park, in the county of Middlesex, for an invention of "Improvements in the construction, use, and employment of the kaleideseope, whereby the images may be secured, copied, or photographed, greatly to the benefit of trade, science, and the arts (to be called 'The relievodioscope')."—Dated 28th January, 1862.

215. Stephen Smith and Thomas Smith, both of the town and county of the town of Nottingham, Cord and Twine Manufacturers, for an invention of "Improvements in the manufacture of cord and twine from mill spun yarns."—Dated 28th January, 1862.

216. James Hankins, of the city of Bristol, Stone Mason, for an invention of "A new composition or wash to be applied to marine and other steam boilers to prevent incrustation."—Dated 28th January, 1862.

217. John Hunt, of Birmingham, in the county of Warwick, Brassfounder, for an invention of "An improvement or improvements in the manufacture of gas and other chandeliers."—Dated 28th January, 1862.

218. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in engines actuated by heated air or by combinations of air and steam."—A communication to him from Jacques Belou (E.E.), a person resident at No. 12, Rue Saint Georges, Paris (France).—Complete specification.—Dated 28th January, 1862.

219. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in the construction of looms for weaving."—A communication to him from Claude Crozet, a person resident at No. 1, Rue de Lyon, Saint Etienne (Loire), in France.—Dated 28th January, 1862.

220. Arthur Herbert Church, of 170, Great Portland Street, in the parish of Saint Marylebone, in the county of Middlesex, Chemist, for an invention of "Improvements in the means of preserving stone, brick, slate, wood, cement, stucco, plaster, whitewash, and colour wash from the injurious action of atmospheric and other influences, also in the application of colours to the surfaces of stone, brick, slate, wood, cement, stucco, mortar, clay, plaster of paris, plaster, whitewash, and colour-wash, and in the retention of such colours thereon."—Dated 28th January, 1862.

221. Charles Culling, of Downham Market, Norfolk, for an invention of "Improvements in fire-arms."—Dated 28th January, 1862.

222. Samuel Cunliffe Lister and James Warburton, of Manningham, near Bradford, in the county of York, Spinners, for an invention of "Improvements in preparing cotton for spinning."—Dated 28th January, 1862.

223. George Henry Morgan and Edward Morgan, both of Grand Junction Terrace, Edgeware Road, in the county of Middlesex, for an invention of "Improvements in carriages."—Dated 28th January, 1862.

224. George Chapman, of Rutland Street, Leicester, for an invention of "Improvements in rotating circular knitting frames."—Dated 28th January, 1862.

225. Gustave Joseph Nicolas de Ridder, of No. 57, Rue Pigale, in the city of Paris, in the empire of France, Engineer, for an invention of "Improvements in railway carriages for the con-

veyance of travellers and goods."—Dated 28th January, 1862.

226. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in engines to be employed for pumping or forcing air or water, or for other purposes where a rectilinear motion is required."—A communication to him from abroad by Wellington Lee, of New York, in the United States of America, Engineer.—Dated 28th January, 1862.

227. William Irlam, of the Gibraltar Iron Works, Newton Heath, near the city of Manchester, Engineer, for an invention of "Improvements in the construction of railway crossings and turntables."—Dated 28th January, 1862.

228. Rudolph Bodmer, of Newport, in the county of Monmouth, and William Wilson, Foreman, in the employ of Messieurs Bodmer, Brothers, of Newport aforesaid, for an invention of "Improvements in the process of manufacturing artificial stones, parts of which improvements are also applicable to the manufacture of artificial fuel."—Dated 28th January, 1862.

229. John Henry Brierley, of Park Terrace, Halifax, Manufacturer, Beech Hill Mills, Halifax, and 58, Aldermanbury, London, for an invention of "A clasp or fastener for reversible belts, bands, or straps."—Dated 29th January, 1862.

230. Thomas Clayton, Mechanic, and William Smith, Overlooker, both of Knowlwood, near Todmorden, in the county of Lancaster, for an invention of "An improved flyer."—Dated 29th January, 1862.

231. François Delamare de Boutteville, the younger, of Fontaine-le-Bourg, in the department of the Seine Inférieure, in the empire of France, for an invention of "Improvements in machinery applicable to the spinning of fibrous substances."—Dated 29th January, 1862.

232. Louis Alexandre Pulvé, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, Iron Chest Builder, for an invention of "Improvements in fireproof iron chests and strong boxes."—Dated 29th January, 1862.

233. John McKean, of Walmer Bridge Mills, near Preston, in the county palatine of Lancaster, Manufacturer, and James Gabbott, of the same place, Manager, for an invention of "Improvements in sizing or dressing yarn or textile materials."—Dated 29th January, 1862.

234. Thomas Meriton, of No. 3, Leadenhall Street, in the city of London, and of Hamburg, Engineer, for an invention of "Improvements in marine and other boilers for generating steam."—Dated 29th January, 1862.

235. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the disintegration and bleaching of textile materials for the manufacture of paper."—A communication to him from abroad by Mr. Jean Baptiste Michel Auguste Siry, of 29, Boulevart St. Martin, Paris, Jeweller.—Dated 29th January, 1862.

236. James Benjamin Harby, of Leytonstone, in the county of Essex, Rope Maker, for an invention of "Improvements in preserving elcctric telegraph cables and wires."—Dated 29th January, 1862.

237. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in machinery for puddling metals."—A communication to him from abroad by François Dumeny and Firmin Lemut, both of Closmortier, near St. Dizier, France.—Dated 29th January, 1862.

238. Benjamin Foster, of Denholme, in the county of York, Manufacturer, and John Moore, of the same place, Manager, for an invention of "Improvements in machinery or apparatus for spinning and doubling wool and other fibrous materials."—Dated 29th January, 1862.

239. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in printing machinery."—A communication to him from abroad by Richard March Hoe, of New York, in the United States of America.—Dated 29th January, 1862.

240. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the boxes for the journals of railroad carriage and other axles."—A communication to him from abroad by Davis Henry Dotterer, of Chicago, in the county of Cook, state of Illinois, United States of America.—Dated 29th January, 1862.

241. George Bedson, of Manchester, in the county of Lancaster, Manager, for an invention of "Improvements in wire fences."—Dated 29th January, 1862.

242. Matthew Collier, of Failsworth, in the county of Lancaster, Manufacturer, for an invention of "Improvements in looms for weaving."—Dated 29th January, 1862.

243. George Phillips, the elder, Chemist, and George Phillips, the younger, Rectifier and Dealer in Spirits, both of 89, Holborn Hill, in the parish of St. Andrew, Holborn, in the city of London, for an invention of "Improvements in the distillation and rectification of alcohols or spirits."—Dated 30th January, 1862.

244. Matthew Allen, of No. 14, Worship Street, in the parish of St. Leonard, Shoreditch, in the county of Middlesex, Builder, for an invention of "Improvements in the construction of buildings for the prevention of fire, and in the materials to be employed therein and therefor."—Dated 30th January, 1862.

245. Theophilus Gontard, of No. 16, Rue des Vieux Augustins, Paris, in the empire of France, Physician, for an invention of "Improved truss plates producing an upward pressure."—Dated 30th January, 1862.

246. Edward Alexander Rippingille, of Staple Hill, near Bristol, for an invention of "Improvements in engines worked by steam or other fluid, and in pumps."—Dated 30th January, 1862.

247. James Firth, of the firm of Edwin Firth and Sons, of Flush Mills, Heckmondwike, near Leeds, in the county of York, for an invention of "An

improvement in finishing mohair cloth."—Dated 30th January, 1862.

248. Henry Robottom and Richard Underwood, both of 31, Robert Street, Hoxton New Town, in the county of Middlesex, Watch Manufacturers, for an invention of "Improvements in watches and pocket chronometers."—Dated 30th January, 1862.

249. William Davies, of Elizabeth Place, Old Bethnall Green Road, in the county of Middlesex, Pattern Maker, for an invention of "Improvements in apparatus for cutting corks and bungs."—Dated 30th January, 1862.

250. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in mechanical wrenches."—A communication to him from abroad by Messrs. Pierre Augustin Samuel and Auguste Toussaint Ozon-de-Verrie, both of 29, Boulevart St. Martin, Paris.—Dated 30th January, 1862.

251. Alexandre César Barnabé Malois, Boot Maker, at Paris, in the empire of France, and of 29, Boulevart St. Martin, for an invention of "Improvements in mechanical fabrication of boot and shoe heels."—Dated 30th January, 1862.

252. Adolphus Lahousse, of Brussels, in the kingdom of Belgium, Mechanician, for an invention of "Improvements in the manufacture of wheels for waggons, locomotive engines, and other vehicles used for railway purposes."—Dated 30th January, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2341. To William Thomas Tongue, of Liverpool, in the county of Lancaster, Wholesale Ironmonger, and John Greer, of the same place, Tin Plate Worker, for the invention of "An improved portable self-acting water-engine for extinguishing fires and other purposes."

2342. And to John Hays Wilson, of the firm of John Hays Wilson and Company, of Liverpool, in the county of Lancaster, Brass Founders and Ship's Ironmongers, for the invention of "Improvements in pumps chiefly applicable to ships' lift pumps."

On both their petitions, recorded in the Office of the Commissioners on the 19th day of September, 1861.

2415. To George Smith, of Liverpool, in the county of Lancaster, Brass and Britannia Metal Finisher, for the invention of "Improvements applicable to gas meters."

On his petition, recorded in the Office of the Commissioners on the 27th day of September, 1861.

2520. To George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for the invention of "Improvements in machinery for manufacturing shoes for horses and other animals."—A communication to him from abroad by Thomas R. Taylor, of Cleveland, Ohio, in the United States of America.

On his petition, recorded in the Office of the Commissioners on the 9th day of October, 1861.

2626. To Joseph Scott Phillips, Major H. M. I. R. List, of No. 10, College Crescent, Finchley Road, London, N.W., for the invention of "A new method and apparatus for the propulsion of vessels through the water."

On his petition, recorded in the Office of the Commissioners on the 21st day of October, 1861.

2677. To Thomas Richardson, of Newcastle-on-Tyne and Robert Irvine, of Hurlet, Renfrewshire, Analytical Chemist, for the invention of "Improvements in treating bones and gelatine."

On their petition, recorded in the Office of the Commissioners on the 25th day of October, 1861.

2769. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in water meters."—A communication to him from abroad by Messrs. Frank G. Johnson, of Brooklyn, King's County, state of New York, William T. B. Milliken, of Morrisania, Westchester County, state of New York, and Edmund Jones, of the city, county, and state of New York, United States of America.

On his petition, recorded in the Office of the Commissioners on the 4th day of November, 1861.

2855. To William Henry Balmain, of St. Helen's in the county of Lancaster, Manufacturing Chemist, and John Kean, of the same place, Manufacturing Chemist, for the invention of "Improvements in the manufacture of flowers of sulphur and roll and other forms of sulphur."

On their petition, recorded in the Office of the Commissioners on the 13th day of November, 1861.

2974. To David Ker, of the West of England Soap Works, Plymouth, in the county of Devon, for the invention of "An improvement in the manufacture of soap."

On his petition, recorded in the Office of the Commissioners on the 26th day of November, 1861.

3156. To John Aitken, of Lasswade, near Edinburgh, for the invention of "Improvements in supplying water to water wheels."

3158. And to Charles Baumann, of Altdorf, Weingarten, Wurtemberg, for the invention of "Improvements in buttons."

On both their petitions, recorded in the Office of the Commissioners on the 16th day of December, 1861.

3185. To Alphonse Treuille, Doctor Physician, and François Xavier Traxler, Civil Engineer, both of 29, Boulevart St. Martin, Paris, in the empire of France, and of No. 53, Chancery Lane, London, for the invention of "Improvements in the manufacture of paper and card paper or cardboard, with the object of preventing forgery and alterations in cheques and other documents, and which improvements are also applicable to the manufacture of playing cards and railway and other tickets."—A communication to them by Mr. Joseph Prosper Olier, Sub-director of the General

Stamp Works of Paris, a person resident at 13, Rue de la Banque, Paris.

On their petition, recorded in the Office of the Commissioners on the 19th day of December, 1861.

3196. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in apparatus for the manufacture of matches."—A communication to him from abroad by Messrs. Francis Lavallée and Son, Merchants, of 29, Boulevart St. Martin, Paris, in the empire of France.

3199. And to EUGENE ETIENNE PEREAU, of Moorgate Street, in the city of London, Merchant, for the invention of "An improved composition for cleaning and revivifying woollen cloths and other fabrics, and the colors thereof."—A communication to him from abroad by Alfred Thomas, of Paris, France.

On both their petitions, recorded in the Office of the Commissioners on the 20th day of December, 1861.

3210. To WILLIAM CHARLES MILES, of Railway Place, Shoreditch, in the county of Middlesex, Lamp Manufacturer, for the invention of "Improvements in lamp glasses for lamps burning paraffine and other light mineral oils."

On his petition, recorded in the Office of the Commissioners on the 21st day of December, 1861.

3216. To CHARLOTTE SMITH, wife of Jabez Smith, of Bedford, in the county of Bedford, Merchant, for the invention of "Improvements in stays."

3218. And to CHARLOTTE SMITH, wife of Jabez Smith, of Bedford, in the county of Bedford, Merchant, for the invention of "Improvements in stays."

On both her petitions, recorded in the Office of the Commissioners on the 24th day of December, 1861.

3228. To THOMAS SIMMONS, Doctor of Medicine, of Birmingham, in the county of Warwick, and THOMAS TIMMINS, General Caster, also of Birmingham aforesaid, for the invention of "Certain improvements in urns or vessels for holding and supplying hot water, tea, coffee, or other liquids separately or conjointly, as also in the stands for the same."

On their petition, recorded in the Office of the Commissioners on the 26th day of December, 1861.

3240. To WILLIAM TURNER and JOHN WILLIAM GIBSON, of Hammersmith, in the county of Dublin, Engineers, for the invention of "Improvements in rolling bridges."

On their petition, recorded in the Office of the Commissioners on the 27th day of December, 1861.

3258. To JOHN BELLAMY PAYNE, of Chard, in the county of Somerset, Engineer and Lace Manufacturer, for the invention of "Improved machinery for the manufacture of laid and other twine, lines ropes, bands, and other cordage, whether made of hemp, flax, or other fibrous substances, or of wire."

On his petition, recorded in the Office of the Commissioners on the 30th day of December, 1861.

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8. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in shears or scissors, chiefly applicable to be employed in the manufacture of laces."—A communication to him from abroad by Pierre Joseph Henninot and André Carpentier, both of Caudry, France.

11. To BENJAMIN RHODES, of Old Ford, Bow, for the invention of "Improvements in forming or making straight and bent pipes and bends for pipes, and also vessels of various shapes, and in coating and protecting objects and articles of various forms, and in the apparatus to be employed therein."

12. To EDWARD BANFIELD, of Ilfracombe, Devon, for the invention of "Improvements in lubricating and maintaining in working order axle journals and brasses applicable also to other journals and bearings."

15. And to JAMES HOWARD, Agricultural Engineer, and EDWARD TENNEY BOUSFIELD, Engineer, both of Bedford, for the invention of "Improved apparatus applicable to steam cultivation."

On their several petitions, recorded in the Office of the Commissioners on the 1st day of January, 1862.

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19. To ATHANASE MATHURIN PIERRE AIRIAU, of Paris, Rue St. Dominique, St. Germain, No. 8, (in the empire of France), for the invention of "A new musical instrument."

22. And to GEORGE JEFFRIES, of Golden Ball Street, Norwich, Gun Maker, for the invention of "Improvements in breech-loading fire-arms."

On both their petitions, recorded in the Office of the Commissioners on the 2nd day of January, 1862.

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25. To GILBERT STRACEY, of Rackheath Hall, near Norwich, in the county of Norfolk, for the invention of "Improvements in the manufacture of artificial fuel."

27. And to WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for the invention of "Improvements in apparatus for dressing, cleaning, or sifting grain."—A communication to him from abroad by Louis Appolinaire Haton, of No. 15, Passage des Petites Ecuries, Paris, in the empire of France, Merchant.

On both their petitions, recorded in the Office of the Commissioners on the 3rd day of January, 1862.

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44. To FREDERICK SHAW, Bookkeeper, of Sheffield, in the county of York, for the invention of "Improvements in apparatus for stopping railway trains."

On his petition, recorded in the Office of the Commissioners on the 7th day of January, 1862.

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61. To JOHN BRUNT, of No. 15, Rue Petrelle, in the city of Paris, Engineer, for the invention of "Improvements in gas meters."

63. To DAVID WILSON, of Colombo, in the island of Ceylon, for the invention of "Improvements in machinery for pulping and preparing coffee."

65. To DAVID WILSON, of Colombo, in the island of Ceylon, for the invention "Improvements in hydraulic presses."

67. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in apparatus

for carburetting and burning gas."—A communication to him from abroad by Léon Farrance and Henri Gloesener, both of Paris, France.

69. And to HARBY BARBER, of Belgrave, in the county of Leicester, Manufacturer, for the invention of "Improvements in safety lamps."

On their several petitions, recorded in the Office of the Commissioners on the 9th day of January, 1862.

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70. To ALPHONSE RENÉ LE MIRE DE NORMANDY, of Odin Lodge, King's Road, Clapham Park, Surrey, Analytical Chemist, for the invention of "An improved method of fixing tubes in tube plates."

71. To JOHN CARTER, of Tipton, in the county of Stafford, Machinist, for the invention of "A new or improved draining plough."

73. To MONTAGUE WIGZELL, of the Strand, Topsham, in the county of Devon, for the invention of "An improved double acting ventilator for railway carriages and other carriages and compartments."

75. To JAMES OATES, of Mirfield, in the county of York, Cabinet Maker, for the invention of "Improvements in washing machines."

76. To HENRY DARVILL, of New Windsor, in the county of Berks, Gentleman, for the invention of "An improved method of hardening chalk for building purposes."

77. To WILLIAM HENRY PREECE, of the town and county of Southampton, Civil Engineer, for the invention of "Improved apparatus for signalling upon railways."

79. And to JOHN KENYON, of Ivy Cottage, Lower Heath, Hampstead, and ARCHIBALD HORN, of Great James Street, Bedford Row, both in the county of Middlesex, Engineers, for the invention of "Improvements in railway signalling by electricity, and in the arrangement of apparatus for that purpose."

On their several petitions, recorded in the Office of the Commissioners on the 10th day of January, 1862.

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83. To JOSEPH WHITE, of 7, Trinity Street, Southwark, in the county of Surrey, for the invention of "Improvements in lubricating, or oil cans, or oil feeders, and in the mechanical arrangements for regulating the flow of oil therefrom."

84. To LAUCHLAN MACKVIDY, of Greenock, in the county of Renfrew, Sugar Refiner, for the invention of "Improvements in apparatuses for reburning animal charcoal."

85. And to THOMAS SCOTT, of Nelson Square, in the county of Surrey, Engineer, for the invention of "Improvements in steam engines."

On their several petitions, recorded in the Office of the Commissioners on the 11th day of January, 1862.

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88. To JOHN MARTIN ROWAN, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in the manufacture of iron and steel."

89. To THOMAS GILBERT, of Birmingham, in the county of Warwick, Manufacturer, and CHARLES GILBERT, of Birmingham aforesaid, Manufacturer, and THOMAS HADDON, of Birmingham aforesaid, Manufacturer, for the invention of "An improvement or improvements in the manufacture of swivels for guns, and in machinery to be employed in the said manufacture."

91. To THOMAS SOAR, of the town and county of the town of Nottingham, Machine Builder, JONATHAN BELSHAW, of Radford, in the county of Nottingham, Lace Maker, and MARCUS SOAR, of the said town and county of the town of Nottingham, Lace Maker, for the invention of "An improved knocker to be attached to doors, shutters, or other parts of premises to which the same may be applicable, and applicable also for the reception of letters and other documents."

95. To HENRY SCHOTTLANDER, of Paris, in the French empire, Merchant, for the invention of "Improvements in albums for containing photographic and other pictures."

97. To JOSEPH BETTELEY, of Liverpool, in the county of Lancaster, Iron Merchant, for an invention of "Improvements in ship building."

98. To THOMAS WRIGHT GARDNER TREEBY, of 1, Westbourne Terrace Villas, Paddington, in the county of Middlesex, Gentleman, for the invention of "An improved method of, and apparatus for, producing rifled cannon and fire-arms."

99. And to JAMES GARTH MARSHALL, of Leeds, in the county of York, Flax Spinner, for the invention of "Improvements in the preparation of flax, hemp, and other fibres previous to being spun."

On their several petitions, recorded in the Office of the Commissioners on the 13th day of January, 1862.

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101. To JOHN CARTER, of 20, Danvers Street, Paulson Square, Chelsea, in the county of Middlesex, Saddler and Harness Maker, for the invention of "An improved shaft tug or bearer used in harness."

104. To JAMES JACK, of Liverpool, in the county of Lancaster, Engineer, for the invention of "An improved method of preparing cores for moulding or shaping metals."

105. To MATTHEW CHADWICK, of Radcliffe, in the county of Lancaster, Machine Maker, for the invention of "Improvements in machinery for folding or platting cloth and for measuring the same."

109. To CHRISTOPHER HILL, of Ferryside, Kidwelly, in the county of Carmarthen, Coal Agent, for the invention of "Improvements in the manufacture of lubricating compounds."

111. And to JAMES GARTH MARSHALL, of Leeds, in the county of York, Flax Spinner, for the invention of "Improvements in the machinery and processes for producing fibre from woven and other textile fabrics."

On their several petitions, recorded in the Office of the Commissioners on the 14th day of January, 1862.

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120. To THOMAS MATANLE, of No. 5, Wilmot Square, Bethnal Green Road, in the county of Middlesex, Brass Manufacturer, for the invention of "An improved runner fastening for umbrellas, parasols, sunshades, and other similar articles."

On his petition, recorded in the Office of the Commissioners on the 16th day of January, 1862.

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130. To JOHN TOW, of Poland Street, Oxford Street, in the county of Middlesex, Ironmonger, for the invention of "Improvements in the construction of stoves or fire places."

132. To THOMAS NEWTON, of the city of Manchester, in the county of Lancaster, Gun and Rifle Manufacturer, for the invention of "Improvements in sights for rifles."

138. And to WILLIAM LOUIS WINANS, of Baltimore, Maryland, United States of America, but now residing at Brighton, in the county of Sussex, and kingdom of England, Civil Engineer, for the invention of "Improvements in the manner of mounting and apparatus for manœuvring cannon or ordnance on ships or vessels of war and floating batteries."

On their several petitions, recorded in the Office of the Commissioners on the 18th day of January, 1862.

140. To WALTER SANDELL MAPPIN, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "A new or improved lock."

142. To THOMAS HOLT, of Edward Street, Blackfriars Road, in the county of Surrey, Bedstead Manufacturer, for the invention of "Improvements in folding iron chairs and chair bedsteads."

144. To WILLIAM BOALER, of Manchester, in the county of Lancaster, Merchant, for the invention of "Certain improvements in the method of sizing paper yarns and woven fabrics, and in machinery or apparatus connected therewith."—A communication to him from abroad by John Adams Rhodes, of Providence, Rhode Island, United States of America.

146. And to JOSEPH BIRD, of Blidworth, in the county of Nottingham, Farmer and Miller, for the invention of "An improved crank axle applicable to cranks of any description whatsoever wherein the wear is mainly on one side thereof."

On their several petitions, recorded in the Office of the Commissioners on the 20th day of January, 1862.

154. To JOHN BATE, of No. 18, Crescent, Birmingham, for the invention of "Improvements in machines for corking or stopping the mouths of bottles, jars, or any vessel requiring to be stopped up air-tight."

156. To GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the county of Surrey, for the invention of "Improvements in machinery for making nails and spikes."—A communication to him from abroad by Carl Gustaf Gustafsgon, a person resident at Hellstorp, near Yönköping, in the kingdom of Sweden.

160. And to WILLIAM BURGESS, of the firm of Burgess and Key, of Newgate Street, in the city of London, Agricultural Implement Makers, for the invention of "Improvements in reaping and mowing machines."

On their several petitions, recorded in the Office of the Commissioners on the 21st day of January, 1862.

164. To ISAAC ROBERTS, of Liverpool, in the county of Lancaster, Contractor, for the invention of "Improvements in combined hydraulic motive power engines and meters."

168. And to THOMAS LITTLE and JOHN LITTLE, both of Alston, in the county of Cumberland, Grocer and Whitesmith, for the invention of "Improvements in apparatus for cooling coffee berries."

On both their petitions, recorded in the Office of the Commissioners on the 22nd day of January, 1862.

Inventions protected for Six Months by the Deposit of Complete Specifications.

NOTICE is hereby given, that the petition of

196. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, praying for Letters Patent for the invention of "Improvements in the prevention or removal of incrustation in, or from, steam generators, and in the apparatus employed therein,"—a communication to him from abroad by Stanislas Michel Lecacheux and Bernard Sartre, both of Marseilles, in the empire of France, —was deposited and recorded in the Office of the Commissioners on the 25th day of January, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

NOTICE is hereby further given, that the petition of

218. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, praying for Letters Patent for the invention of "Improvements in engines actuated by heated air, or by combinations of air and steam,"—a communication from Jacques Belou (C.E.), a person resident at No. 12, Rue Saint Georges, Paris, France,—was deposited and recorded in the Office of the Commissioners on the 28th day of January, 1862, and a complete specification acompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of LETTERS PATENT which passed the Great Seal on the

31st January, 1862.

1928. CHARLES SCHINZ, of Offenburg, in the Grand Duchy of Baden, Engineer, for an invention of "Improvements in glass furnaces."—Dated 3rd August, 1861.

1934. ALEXANDER PRINCE, of the Office for Patents, 4, Trafalgar Square, Charing Cross, in the county of Middlesex, for an invention of "Improvements in palate and tooth plates for dental purposes."—A communication to him from abroad by John Mittelhaus (Court Dentist), resident at Berlin, in the kingdom of Prussia.—Dated 3rd August, 1861.

1943. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in locks and other fastenings and in keys."—A communication to him from abroad by Auguste Théodore Baudrit, of Paris, France.—Dated 5th August, 1861.

1944. FRÉDÉRIC SEILER, of Paris, in the French empire, Engineer, for an invention of "An improved mode of overleaping differential levels, applicable to canals and to other purposes."—Dated 5th August, 1861.

1950. RUDOLPH WAPPENSTEIN, of the city of Manchester, in the county of Lancaster, Medallion

Engraver, for an invention of "An improved cop tube and cover for rollers used in spinning, and in apparatus for putting the tubes on the spindles."—Dated 6th August, 1861.

1952. Frederick Tolhausen, Civil Engineer and Patent Agent, of 35, Boulevart Bonne-Nouvelle, Paris, in the empire of France, for an invention of "Improved mechanical contrivances increasing the effect of motive power."—A communication to him from François Berger, a person resident in the town of St. Etienne, empire of France.—Dated 6th August, 1861.

1953. Joseph Mac Morran, of No. 33, Leicester Square, London, in the county of Middlesex, Engineer, for an invention of "Improvements in the construction of machines for mincing meat and other substances."—Dated 6th August, 1861.

1957. Alfred Vincent Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improvements in the construction of reversible seats."—A communication to him from abroad by Thomas Rainey, of the city of New York, United States of America.—Dated 6th August, 1861.

1966. Thomas George Webb, of Manchester, in the county of Lancaster, Glass Manufacturer, for an invention of "Improvements in the manufacture of articles of glass."—Dated 7th August, 1861.

2026. William Wilds, of Hertford, in the county of Hertford, Architect and Surveyor, for an invention of "Improvements in apparatus for ventilating."—Dated 14th August, 1861.

2053. William Bennett, of 14A, London Street, Paddington, in the county of Middlesex, for an invention of "A new and improved composition to be used as fuel and in the lighting of fires."—Dated 19th August, 1861.

2063. George Ingram, of Old Street, in the county of Middlesex, for an invention of "Improvements in trams to be used in connection with the wheels of carriages on common roads."—Dated 20th August, 1861.

2088. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Certain improvements in presses for lithographic printing."—A communication to him from Mr. Henri Voirin, a person resident at No. 17, Rue Mayet, Paris.—Dated 21st August, 1861.

109. William Dredge Player, of the firm of Iliffe and Player, Brothers, Button Manufacturer, of Birmingham, in the county of Warwick, for an invention of "Certain improvements in the description of buttons commonly known as linen buttons."—Dated 23rd August, 1861.

2222. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in smoke-consuming furnaces."—A communication to him from Bernard Palazot, a person resident at No. 131, Route d'Espagne, Bourdeaux (Gironde).—Dated 6th September, 1861.

2230. John James Russell, of the Crown Tube Works, Wednesbury, Patent Tube Manufacturer, for an invention of "Improvements in preparing the ends of welded tubes previous to their being fixed in plates."—Dated 6th September, 1861.

2268. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "An improved combination of chemical and mechanical processes for the conversion of fibrous vegetable matters into paper pulp."—A communication to him from Louis Achille Carteron, a person resident at Dieuze (département de la Meurthe).—Dated 12th September, 1861.

2295. Henry Constantine Jennings, of Great Tower Street, in the city of London, Chemist, for an invention of "Improvements in treating hides and skins."—Dated 14th September, 1861.

2524. John James Russell, of the Crown Tube Works, Wednesbury, Patent Tube Manufacturer, for an invention of "Improvements in hand stocks and dies for cutting screws."—Dated 9th October, 1861.

2575. John Jay Adams, of the city and state of New York, and United States of America, for an invention of "A new and useful improvement in the manufacture of flexible back brushes for cleaning and dusting horses and other animals."—Dated 16th October, 1861.

2686. Jean Louis Sicard, of Nice, France, and of 4, South Street, Finsbury, London, Gentleman, for an invention of "An improved apparatus for purifying, measuring, and weighing grain and oleaginous seeds."—Dated 26th October, 1861.

2810. Aristide Balthazard Bérard, Civil Engineer, Chevalier de la Légion d'Honneur, of No. 51, Avenue Montaigne, Paris, for an invention of "Improvements in apparatus for separating metals from their ores."—Dated 8th November, 1861.

2863. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in the manufacture of soap."—A communication to him from abroad by the inventor, Campbell Morfit, of New York, United States of America, Chemist.—Dated 13th November, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 29th January*, 1862, *inclusive.*)

27th January.

280. Joseph Grimond, of the city of Manchester, in the county of Lancaster, Manufacturer, for an invention of "Improvements in the manufacture of hearth rugs."—Dated 1st February, 1859.

28th January.

276. James Robertson, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in details by which motive force is transmitted in machinery."—Dated 31st January, 1859.

422. John Thomas Jones, of Glasgow, in the county of Lanark, North Britain, Machinist, for an invention of "Improvements in sewing machines."—Dated 15th February, 1859.

29th January.

301. Samuel Tearne, of Birmingham, in the county of Warwick, Japanner, for an invention of "Improvements in ornamenting surfaces."—Dated 2nd February, 1859.

304. John Hirst, junior, of Dobscross, in Saddleworth, in the county of York, Merchant, and James Hollingworth, of the same place, Joiner, for an invention of "Improvements in the construction of power looms." — Dated 2nd February, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 29th January*, 1862, *inclusive.*)

27th January.

250. George Ritchie, of 3, Monmouth Place, New Cross, New Kent Road, for an invention of "Improvements in beds or mattresses."—Dated 2nd February, 1855.

29th January.

320. Auguste Edouard Loradoux Bellford, of 32, Essex Street, Strand, London, Patent Agent, for an invention of "Certain materials to be used for cementing and painting, and also applicable to printing and dressing or finishing fabrics."—A communication from Professor Frederic Kuhlmann, of Lille, France.—Dated 10th February, 1855.

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THE COMMISSIONERS OF PATENTS' JOURNAL.

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No. 844. TUESDAY, FEBRUARY 4, 1862. Price 2d.

Applications for Letters Patent.

(31*st January and* 1*st and* 3*rd February*, 1862.)

253. David Littlehales, Japanner, of Brearley Street West, Birmingham, in the county of Warwick, for an invention of "An improved plastic compound as a substitute for papier maché."—Dated 31st January, 1862.

254. Horatio White, of 13, Mornington Place, Hampstead Road, in the county of Middlesex, for an invention of "Improvements in collars."—Dated 31st January, 1862.

255. John Silvester, of the firm of George Salter and Co., of West Bromwich, in the county of Stafford, Manufacturers, for an invention of "Improvements in pocket and other spring balances."—Dated 31st January, 1862.

256. Francis Baggett, of Birmingham, in the county of Warwick, Gun Maker, and John Sanger, of Aston, near Birmingham aforesaid, Gun Maker, for an invention of "An improvement or improvements in breech-loading small arms."—Dated 31st January, 1862.

257. Hermann Schatten, of Hesse Cassel, Civil Engineer, for an invention of "Improvements in the manufacture or construction of gas meters."—Dated 31st January, 1862.

258. John Dodge, of Little Portland Street, in the county of Middlesex, Carriage Builder, for an invention of "Improvements in C springs for carriages when used without a perch."—Dated 31st January, 1862.

259. William Walton, of Manchester, and Frederick Walton, of the British Grove Works, Chiswick, for an invention of "Improvements in the manufacture of wire cards."—Dated 31st January, 1862.

260. George Mehrtens, of No. 27½ Charles Street, Hampstead Road, in the county of Middlesex, for an invention of "Improvements in ladies' stays, and in the bodies of ladies' dresses."—Dated 31st January, 1862.

261. John Hargreaves, of No. 12, Clifton Cottages, Clifton Road, Peckham, in the county of Surrey, for an invention of "Improvements in the manufacture of pipes or tubes for conveying water, gas, acids, sewage, enclosing electric telegraph wires, and for other purposes, which improvements are also applicable to the manufacture of other vessels and articles, and in the machinery or apparatus connected therewith."—Dated 31st January, 1862.

262. Pierre Scheurweghs, Distillator, and Alexandre Joseph Aurele Henry De Boisserolle, Manufacturer, both of Paris, in the French empire, for an invention of "Certain improvements in treating fatty and oily matters for obtaining their acidification."—Dated 31st January, 1862.

263. Charles Pontifax, junior, of 55, Shoe Lane, in the city of London, Coppersmith and Engineer, for an invention of "Improvements in apparatus for cooling or heating fluids or liquids."—Dated 31st January, 1862.

264. Edward Henry Cradock Monckton, of Fineshade, in the county of Northampton, Esquire, for an invention of "Obtaining ammonia and other useful products by means of electricity direct from the atmosphere and other sources with economy of fuel and prevention of smoke."—Dated 31st January, 1862.

265. Thomas Stephens, of Coventry, in the county of Warwick, Ribbon Manufacturer, for an invention of "Improvements in the manufacture of book markers."—Dated 31st January, 1862.

266. James Gibbins, of No. 30, London Wall, in the city of London, Varnish Manufacturer, for an invention of "An improved composition for coating wood, metal, and other materials."—Dated 31st January, 1862.

267. Alexander Forsyth, of Glasgow, in the county of Lanark, North Britain, Agent, for an invention of "Improvements in the manufacture of frames and in tablets used for advertising purposes."—Dated 31st January, 1862.

268. Charles Veronique, of Rue Thaitbout, in the empire of France, Tailor, for an invention of "An improved wrapper garment."—Dated 31st January, 1862.

269. William Smith, of Bury, in the county of Lancaster, for an invention of "Improvements in machinery for the manufacture of bricks, tiles, or other articles of a similar nature or character."—Dated 1st February, 1862.

270. Leon Fauvel, of Paris, France, Manufacturer, for an invention of "Improvements in apparatus for indicating the existence of escapes in gas tubing and for stopping the continuance thereof."—Dated 1st February, 1862.

271. Robert Burkhardt and Carl Doebler, of the city of Manchester, in the county of Lancaster, for an invention of "Improvements in æolian harps."—Dated 1st February, 1862.

272. Jonathan Pendlebury, of Dukinfield, in the county of Chester, Engineer, for an invention of "Improvements in lubricating steam engine cylinders, slides, and other surfaces."—Dated 1st February, 1862.

273. John Hill, of 212, Piccadilly, county of Middlesex, Travelling Equipage Maker, for an invention of "The improvement in construction of portable chairs and other articles for sitting on, reclining on, road, Bath, invalid, wheel, and children's carriages, ambulances, or vehicles for carrying sick or wounded."—Dated 1st February, 1862.

274. Joseph Deprez, of Auzin, in the department du Nord, in the empire of France, Engineer, for an invention of "Improvements in the direct digging of mines."—Dated 1st February, 1862.

275. Friedrich Wilhelm Daehne, of Swansea, Glamorganshire, for an invention of "Improvements in furnaces used in the manufacture of zinc."—Dated 1st February, 1862.

276. Thomas Cook, of Coburg Road, Old Kent Road, in the county of Surrey, Machinist, for an invention of "Improvements in machinery for punching, cutting, and pressing metals and other materials."—Dated 1st February, 1862.

277. John Harris, of Store Street, Tottenham Court Road, in the county of Middlesex, for an invention of "Improvements in mattresses, squabs, pillows, and other like articles of furniture."—Dated 1st February, 1862.

278. Thomas Cook, of Coburg Road, Old Kent Road, in the county of Surrey, Machinist, for an invention of "Improvements in machinery for folding envelopes."—Dated 1st February, 1862.

279. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in machinery or apparatus for the manufacture of festooned edging or material."—A communication to him from abroad by Mr. Jean Joseph Basset, Proprietor, of 29, Boulevart St. Martin, Paris.—Dated 1st February, 1862.

280. Francis Riesbeck and William Becker, both of Aldermanbury, in the city of London, Manufacturers, for an invention of "Improvements in locks or fastenings for bags, porte-monnaies, and other like articles having metal frames."—Dated 1st February, 1862.

281. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improved processes for the recovery of the oleic acid contained in the residual scouring waters of woollen and other textile materials or fabrics."—A communication to him from Edmond Lepainteur, a person resident at Gallard, by Longeron (Maine et Loire), France.—Dated 1st February, 1862.

282. Lawrence Hill, of Port Glasgow, in the county of Renfrew, North Britain, Shipbuilder, for an invention of "Improvements in applying armour plating to war ships."—Dated 3rd February, 1862.

283. David Joy, of the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in machinery for forging metals, also applicable to other purposes."—Dated 3rd February, 1862.

284. Charles William Lancaster, of New Bond Street, in the county of Middlesex, Gun Maker, for an invention of "Improvements in strengthening cast iron ordnance."—Dated 3rd February, 1862.

285. Charles Stevens, of 31, Charing Cross, in the county of Middlesex, Patent Agent, for an invention of "An improved axletree."—A communication to him from abroad by Victor Boulanger, of Paris, in the empire of France.—Dated 3rd February, 1862.

286. James John King, of Chase Lodge, Lavender Hill, Wandsworth Road, in the county of Surrey, Cabinet Maker, for an invention of "Improvements in the fastenings of bedsteads, which fastenings are also applicable to other portable framework."—Dated 3rd February, 1862.

287. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in machinery for spinning."—A communication to him from abroad by Henri Schlumberger, of Guebwiller, in the empire of France.—Dated 3rd February, 1862.

288. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in processes for preserving and colouring wood, denominated xylochromic and xyloplastic processes."—A communication to him from abroad by Messieurs Heinrich Sperl, Doctor, Richard Hogen, and Wolfgang Springer, of Nuremberg, Bavaria, representatives of the Xylochromic and Xyloplastic Product Company, of same place.—Dated 3rd February, 1862.

Notices to Proceed.

NOTICE is hereby given, that

2264. WILLIAM STEEVENS, of Godolphin Road, Hammersmith, in the county of Middlesex, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in mechanism or apparatus for ploughing and cultivating the land by steam and other power."

As set forth in his petition, recorded in the said office on the 12th day of September, 1861.

2341. And WILLIAM THOMAS TONGUE, of Liverpool, in the county of Lancaster, Wholesale Ironmonger, and JOHN GREER, of the same place, Tin Plate Worker, have given the like notice in respect of the invention of "An improved portable self-acting water-engine for extinguishing fires and other purposes."

2342. And JOHN HAYS WILSON, of the firm of John Hays Wilson and Company, of Liverpool, in the county of Lancaster, Brass Founders and Ships Ironmongers, has given the like notice in respect of the invention of "Improvements in pumps chiefly applicable to ships' lift pumps."

As set forth in their respective petitions, both recorded in the said office on the 19th day of September, 1861.

2373. And HENRY BRINSMEAD, of Ipswich, in the county of Suffolk, Machinist, has given the like notice in respect of the invention of "Improvements in apparatus for raising and stacking straw and other agricultural produce."

As set forth in his petition, recorded in the said office on the 23rd day of September, 1861.

2383. And CHARLES WATT, of Graham Street, Walworth, Surrey, Chemist, JOHN WATT, of Lorimer Street, Walworth, Chemist, and THOMAS SNAITH HAVISIDE, of Cornhill, in the city of London, Gentleman, have given the like notice in respect of the invention of "An improved mode or method of bleaching palm oil."

As set forth in their petition, recorded in the said office on the 24th day of September, 1861.

2391. And HENRY PURNELL, of Glasgow, in the county of Lanark, North Britain, Engineer and Manufacturer of Warming and Ventilating Apparatus, has given the like notice in respect of the invention of "Improvements in the constructing and arranging warming apparatus."

2396. And THOMAS RICHARDSON, of Newcastle-upon-Tyne, Chemist, has given the like notice in respect of the invention of "Improvements in the manufacture of muriate of iron for the purification of coal gas."

As set forth in their respective petitions, both recorded in the said office on the 25th day of Sepember, 1861.

2400. And THOMAS BENTLEY, of Margate, in the county of Kent, Ironmonger, has given the like notice in respect of the invention of "Improvements in apparatus for beating eggs and for mixing or agitating other fluids, compounds, or matters."

2401. And HENRY NUNN, of Chelsea, in the county of Middlesex, Whitesmith, has given the like notice in respect of the invention of "Improvements in mangles."

2405. And SAMUEL SINCLAIR ROBSON, of Sunderland, in the county of Durham, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for raising or lowering heavy bodies."

2407. And JOSEPH TESSIER, Proprietor, of No. 48, Rue St. Nicolas d'Antin, in the city of Paris, empire of France, has given the like notice in respect of the invention of "Improved means of treating barley, corn, and other cereals for brewing and other purposes."

2410. And VICTOR SOSTHÈNE LÉTÉ, of Paris, France, Gentleman, has given the like notice in respect of the invention of "Improvements in aerated or sparkling white wines."

As set forth in their respective petitions, all recorded in the said office on the 26th day of September, 1861.

2415. And GEORGE SMITH, of Liverpool, in the county of Lancaster, Brass and Britannia Metal Finisher, has given the like notice in respect of the invention of "Improvements applicable to gas meters."

As set forth in his petition, recorded in the said office on the 27th day of September, 1861.

2424. And SAMUEL WILTON RIX, of Beccles, in the county of Suffolk, Gentleman, has given the like notice in respect of the invention of "New and improved methods of attaching or fixing woodwork, ironwork, fittings, or furniture to walls or buildings."—A communication to him from abroad by John Ackrill, Charles Maplestone, and Frederic Kaweran, of Melbourne, in the county of Bourke, in the colony of Victoria.

2425. And JOHN REEVES, of the city of New York, in the United States of America, now residing in London, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in electro-magnetic engines for obtaining and applying motive power."

2428. And THOMAS POTTS, of Old Kent Road, in the county of Surrey, Gentleman, has given the like notice in respect of the invention of "An improvement in clasps for books, portfolios, desks, and other similar articles."

2429. And MEINRAD THEILER, of Einsiedeln, in the Republic of Switzerland, Engineer, has given the like notice in respect of the invention of "Improvements in telegraphs."

As set forth in their respective petitions, all recorded in the said office on the 28th day of September, 1861.

2434. And BENJAMIN GEORGE GEORGE, of Hatton Garden, in the city of London, Lithographer, has given the like notice in respect of the invention of "Improvements in the mounting of tablets, show bills, prints, photographs, and drawings, and of producing embossed ornamentation, applicable to various purposes."

2435. And Joseph Lush, of St. George's Square, Portsea, in the county of Hants, Brewer, has given the like notice in respect of the invention of "Improvements in mashing attemperators."

As set forth in their respective petitions, both recorded in the said office on the 30th day of September, 1861.

2442. And William Edsall Matthews, of Sea View, parish of St. Helen's, in the Isle of Wight, Baker, has given the like notice in respect of the invention of "An improved apparatus for conveying a line or other medium of communication from a ship or vessel for the purpose of obtaining relief or assistance in case of shipwreck, or for any other purpose to which the invention may apply."

2448. And William Henry Payn, of Dover, in the county of Kent, Solicitor, has given the like notice in respect of the invention of "Improvements in apparatus for preventing the loss of and facilitating the recovery of ships' moorings, and submerged property in general."—A communication to him from abroad by Elton Templemore, of Madras, India, Civil Engineer.

As set forth in their respective petitions, both recorded in the said office on the 1st day of October, 1861.

2458. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in the manufacture of figured colored fabrics, and in machinery employed therein."—A communication to him from abroad by Edme Germain Bossuat, of Paris, France.

2459. And Walkden Thompson and Thomas Stather, of the borough of Kingston-upon-Hull, Engineers, have given the like notice in respect of the invention of "Improvements in hydraulic presses."

As set forth in their respective petitions, both recorded in the said office on the 2nd day of October, 1861.

2472. And Joseph Wood, of Birmingham, in the county of Warwick, Gentleman, has given the like notice in respect of the invention of "Improvements in the manufacture of metal pens and holders, in tools employed therein, and in cards for carrying the same."

As set forth in his petition, recorded in the said office on the 3rd day of October, 1861.

2485. And Samuel Icely, of Kent Cottage, Byron Street, Bromley, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "An improved manufacture of gongs."

As set forth in his petition, recorded in the said office on the 4th day of October, 1861.

2496. And Thomas Hughes, of Birmingham, in the county of Warwick, Manager of the Imperial Iron Tube Company, has given the like notice in respect of the invention of "An improved high pressure tap for regulating and controlling the flow of steam water or other fluids."

As set forth in his petition, recorded in the said office on the 5th day of October, 1861.

2508. And Henry Willis, of Albany Street, Regent's Park, in the county of Middlesex, Organ Builder, has given the like notice in respect of the invention of "Improvements in the construction of organs."

As set forth in his petition, recorded in the said office on the 8th day of October, 1861.

2520. And George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in machinery for manufacturing shoes for horses and other animals."—A communication to him from abroad by Thomos Randolph Taylor, of Cleveland, Ohio, in the United States of America.

As set forth in his petition, recorded in the said office on the 9th day of October, 1861.

2538. And William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for bending iron rails or bars."—A communication to him from abroad by Henri Nicholas Rogé, of 29, Boulevart St. Martin, Paris.

As set forth in his petition, recorded in the said office on the 10th day of October, 1861.

2578. And William Clark, of 53, Chancery, Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in the means or apparatus for closing and securing mail bags and other packages."—A communication to him from abroad by Jean Rémy Boubilla, of 29, Boulevart St. Martin, Paris, Post Office Employé.

As set forth in his petition, recorded in the said office on the 16th day of October, 1861.

2589. And Thomas Edward Merritt, of Rochester, in the county of Kent, Drawing Master, has given the like notice in respect of the invention of "Improvements in apparatus for obtaining motive power."

As set forth in his petition, recorded in the said office on the 17th day of October, 1861.

2649. And Joseph Felix Victor Deliry, of the town of Soissons, in the empire of France, Baker, has given the like notice in respect of the invention of "An improved mechanical kneading trough."

As set forth in his petition, recorded in the said office on the 23rd day of October, 1861.

2740. And Elizabeth Anne Maling, of No. 25, Whitehead's Grove, Chelsea, in the county of

Middlesex, Spinster, has given the like notice in respect of the invention of "Improvements in glass cases for the cultivation of plants and flowers."

As set forth in her petition, recorded in the said office on the 1st day of November, 1861.

2761. And GEORGE EVANS, of 69, Gloucester Terrace, Portman Square, has given the like notice in respect of the invention of "Improvements in treating peat to render it useful as fuel, and for illuminating and metallurgical purposes."

As set forth in his petition, recorded in the said office on the 2nd day of November, 1861.

2795. And JOHN RICHARDSON WIGHAM, of Capel Street, in the city of Dublin, Ireland, has given the like notice in respect of the invention of "Improvements in apparatus for the manufacture of gas, parts of which are also applicable for cooking purposes."

As set forth in his petition, recorded in the said office on the 7th day of November, 1861.

2974. And DAVID KER, of the West of England Soap Works, Plymouth, in the county of Devon, has given the like notice in respect of the invention of "An improvement in the manufacture of soap."

As set forth in his petition, recorded in the said office on the 26th day of November, 1861.

3035. And WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improvements in the manufacture of nose bags and similar articles, and in apparatus connected with such manufacture." — A communication to him from abroad by Felix Loignon, Merchant, and Victor Casse, Manufacturer, both of No. 15, Passage des Petites Ecuries, Paris, France.

As set forth in his petition, recorded in the said office on the 4th day of December, 1861.

3101. And MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "Improvements in jack machinery for moving heavy bodies." — A communication from Félix Winand, a person resident at Goffontaine-Fraipont, in the Kingdom of Belgium.

As set forth in his petition, recorded in the said office on the 11th day of December, 1861.

3112. And MARC ANTOINE FRANÇOIS MENNONS, of Furnival's Inn, London, E.C., has given the like notice in respect of the invention of "An improved means of defecating and purifying cane and other saccharine juices."—A communication from Louis Marie Amand Achille de Courson de la Villeneuve, Brigadier General in the French Army, and Commander of the Legion of Honour, a person resident at Caen (Calvados), in the empire of France.

As set forth in his petition, recorded in the said office on the 12th day of December, 1861.

3177. And JEAN MARIE HOSPICE AUGUSTE TAURINES, of Paris, in the French empire, Constructor, has given the like notice in respect of the invention of "Improved modes of constructing balances, weigh-bridges, and other weighing-machines."

As set forth in his petition, recorded in the said office on the 18th day of December, 1861.

3202. And GEORGE TOMLINSON, of Loughborough Park, Brixton, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in machinery for attaching the soles of boots and shoes to the upper leathers."—A communication to him from abroad by Simon Smith Bucklin, a person resident at Brookline, Massachusetts, United States of America.

As set forth in his petition, recorded in the said office on the 20th day of December, 1861.

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15. And JAMES HOWARD, Agricultural Engineer, and EDWARD TENNEY BOUSFIELD, Engineer, both of Bedford, have given the like notice in respect of the invention of "Improved apparatus applicable to steam cultivation."

As set forth in their petition, recorded in the said office on the 1st day of January, 1862.

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62. And THOMAS ALDRIDGE WESTON, of Birmingham, in the county of Warwick, Mechanical Engineer, has given the like notice in respect of the invention of "A new or improved multiplying gearing for transmitting and multiplying power, which said gearing may be applied to cranes, windlasses, capstans, and presses, and to other purposes where it is required to transmit and multiply power."

As set forth in his petition, recorded in the said office on the 9th day of January, 1862.

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88. And JOHN MARTIN ROWAN, of Glasgow, in the county of Lanark, North Britain, Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of iron and steel."

As set forth in his petition, recorded in the said office on the 13th day of January, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

4th February, 1862.

1959. Francis Silveston, Watch Manufacturer, of Coventry, in the county of Warwick, for an invention of "Certain improvements in watches."—Dated 6th August, 1861.

1981. Albert Julius Mott, of Liverpool, in the county of Lancaster, Wine and Spirit Merchant, for an invention of "Improvements in apparatus for drawing beer and other liquids from casks and other vessels, and in excluding the air from the liquids in or remaining in the said vessels."—Dated 9th August, 1861.

1982. Charles Peters Moody, of Corton Denham, in the county of Somerset, Gentleman, for an invention of "Improvements in the construction of gates."—Dated 9th August, 1861.

1986. Henry Chatwin, of Birmingham, in the county of Warwick, Manufacturer of Pearl, Ivory, Tortoise-shell, and Leather Card Cases and other Ornamental Articles, for an invention of "Certain improvements in the manufacture of card, needle, pin, and other cases, and in the application to such articles of a new branch of ornamental art not hitherto applied to such goods."—Dated 9th August, 1861.

1989. James Gray, of Manchester, in the county of Lancaster, Cotton Spinner, Thomas Kershaw, of the same place, Manager, Benjamin Crowther, of the same place, Mechanic, and Alfred Dean, of the same place, Roller Coverer, for an invention of "Improvements in mules for spinning."—Dated 9th August, 1861.

1990. Richard Alfred Godwin, of 151, Newport Street, Paradise Street, Lambeth, in the county of Surrey, for an invention of "Improvements in pumps."—Dated 9th August, 1861.

1997. Andrew Barclay, of Kilmarnock, in the county of Ayr, North Britain, Engineer, for an invention of "Improvements in machinery or apparatus for raising, lowering, or moving heavy bodies."—Dated 10th August, 1861.

1998. Montague Wigzell, of Friar's Green, Exeter, in the county of Devon, for an invention of "A machine or apparatus for twisting ordinary nails, and all other similar driving articles of a parallel or tapered form, and of a plain, fluted, grooved, or indented section throughout or in part."—Dated 10th August, 1861.

1999. Montague Wigzell, of Friar's Green, Exeter, in the county of Devon, for an invention of "Improvements in machinery or apparatus for making plain twisted nails, spiral fluted nails and other similar driving articles of a twisted or spiral fluted form throughout or in part."—Dated 10th August, 1861.

2015. Benjamin Cooper, of Frome, in the county of Somerset, Woollen Manufacturer, for an invention of "Improved machinery for spinning and doubling fibrous materials."—Dated 13th August, 1861.

2017. Edward Alexander Rippingille, of Prestolee Farnworth, near the city of Manchester, Gentleman, for an invention of "Certain improvements in steam engines."—Dated 14th August, 1861.

2029. Stephen Carey and William Morgan Pierce, of the Animal Charcoal Works, East Ham, in the county of Essex, for an invention of "Improvements in apparatus for reburning animal charcoal."—Dated 15th August, 1861.

2065. William Fitkin, of 88, Fleet Street, in the city of London, Dentist, for an invention of "Improvements in apparatus or instruments for extracting teeth."—Dated 20th August, 1861.

2074. Richard Sydney Lambert, of White Hall, Clevedon, in the county of Somerset, for an invention of "An improved 'skipping dipper,' or vessel for removing sugar and other liquids from boiling pans."—Dated 20th August, 1861.

2078. Nicholas Fisher, of Milton, near Blisworth, Northamptonshire, for an invention of "Improvements in agricultural implements for grubbing and cultivating land."—Dated 20th August, 1861.

2083. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in optical and illuminating apparatus."—A communication to him from abroad by William Ferdinand Count de Douhet, of 29, Boulevart St. Martin, Paris, in the empire of France.—Dated 21st August, 1861.

2094. James Kane, of Templemoyle, near Dungwen, in the county of Londonderry, Ireland, for an invention of "Improvements in treating flax, hemp, and other analogous substances which yield fibres for the purpose of manufacturing from them fibres adapted to be spun into yarn and thread."—Dated 21st August, 1861.

2102. William Baines, of the London Works, Smethwick, in the county of Stafford, Engineer, for an invention of "Improvements in the construction of girders, frames, or other apparatus fixed or moveable, and for certain peculiar forms or sections of iron used therein."—Dated 22nd August, 1861.

2104. Joseph Whitworth and William Wilson Hulse, of the city of Manchester, in the county of Lancaster, Engineers, for an invention of "Improvements in sights for small arms and ordnance, and in fitting apparatus used with small arms."—Dated 23rd August, 1861.

2117. James Cranston, of Birmingham, in the county of Warwick, Architect, for an invention of "Improvements in the construction of conservatories, orchard houses, and other horticultural erections, which improvements are also applicable to the covering of areas such as are used for drill sheds, markets, railway sheds, colonists and army huts, and many other similar purposes."—Dated 24th August, 1861.

2143. William Stuart Guinness, of New York, in the United States of America, for an invention of "Improvements in sewing machines."—Dated 28th August, 1861.

2676. Jean Baptiste Schalkenbach, of Treves, Rhenish Prussia, for an invention of "A new kind of keyed musical instrument combining the effects of percussion instruments or the effect of trumpets and similar instruments with the effects of ordinary keyed instruments."—Dated 25th October, 1861.

2738. William James Williams, of Warnford Court, in the city of London, Merchant, for an invention of "An improved process for correctly transmitting the effect of the main levers in platform scales to the steelyard or weighing beam of platform scales."—Dated 1st November, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 1st February*, 1862, *inclusive.*)

30th January.

295. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved blowing machine." — A communication from Mr. Antoine Louis Hyacinthe Fiefnet de Sauville, of Paris, in the empire of France.—Dated 1st February, 1859.

31st January.

312. Samuel Dobson Davison, of Leith, in the county of Mid Lothian, North Britain, Engineer, for an invention of "Improvements in locomotive steam-engines."—Dated 3rd February, 1859.

357. Alexander Clark, of Gate Street, Lincoln's Inn Fields, in the county of Middlesex, Engineer and Revolving Shutter Manufacturer, for an invention of "Improvements in revolving shutters and blinds, and in apparatus connected therewith."—Dated 8th February, 1859.

398. Samuel Hazard Huntly, of Upper Baker Street, in the county of Middlesex, for an invention of "Improvements in cooking apparatus."—Dated 12th February, 1859.

1st February.

309. William Clayton and Jacob Goodfellow, both of Blackburn, in the county of Lancaster, Engineers, for an invention of "Certain improvements in metallic pistons."—Dated 3rd February, 1859.

326. Patrick Adie, of the Strand, in the county of Middlesex, Mathematical Instrument Maker, for an invention of "Improvements in apparatus for taking levels and measuring angles."—Dated 4th February, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

1st February, 1862.

244. Thomas Ogden Dixon, of Stecton, near Keighley, in the county of York, Bobbin Manufacturer, for an invention of "Improvements in machinery or apparatus for turning, boring, cutting, and shaping wood and similar materials."—Dated 1st February, 1855.

Erratum in Journals of 17th and 31st January, 1862.

105. For "platting" read "plaiting."

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Sommaire de toutes les Inventions brevetées en Angleterre depuis 1617 jusqu'en 1854 inclusivement, arrangées d'après le plus grand nombre de rubriques, avec renvois aux Inventions et Découvertes décrites dans les ouvrages scientifiques de différentes nations, classés par le Professeur Schubarth. Par B. Woodcroft.

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Verzeichniss aller in England von 1617—1854 incl. patentirten Erfindungen, unter vielfältige Titel gebracht, mit Hinweisungen auf Erfindungen und Entdeckungen die nach Prof. Schubarth's Klassificirung in den wissenschaftlichen Werken verschiedener Nationen beschrieben sind. Von B. Woodcroft.

Die hier aufgeführten fremden Werke machen einen Theil der Bibliothek der Patent Commission aus, allwo sie nachgeschlagen oder schriftliche Uebersetzungen besorgt werden können.

Repertorio di tutte le Invenzioni munite di Lettere Patenti in Inghilterra dal 1617—1854 inclusivo, poste in ordine sotto il piu gran numero di capi, con riferenze alle Invenzioni e Scoperti descritti nelle opere scientifiche di diverse nazioni, classate dal Professore Schubarth. Dal Sig. B. Woodcroft.

Le opere straniere quì indicate possono esser consultate nella Biblioteca dei Commissari delle Patenti e traduzioni in manuscritto vi possono ottenersi.

B. Woodcroft,
Superintendent of Specifications, &c.

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THE REFERENCE INDEX of PATENTS pointing out the Office in which each enrolled Specification of a Patent may be consulted; the Books in which Specifications, Law Proceedings, and other subjects connected with Inventions have been noticed; also such of the Specifications of Patents granted under the Act of 21 James I. as have been published by the authority of the Commissioners. Price 30*s*.

AN APPENDIX to the REFERENCE INDEX of PATENTS of INVENTION, containing Abstracts from such of the early Patents and Signet Bills as describe the nature of the invention, and which Patents have no enrolled Specifications Price 4*s*.

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NUMBER of VISITORS for the Week ending 1st February, 1862, 3,559.

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This change will meet the convenience of a large lass of engineers, machinists, and others, who in the year 1858 memoralized the Commissioners of Patents for the opening of the Patent Museum on Saturday evenings, a request with which the Commissioners of Patents regretted their inability to comply, owing to difficulties suggested by the Authorities at the South Kensington Museum.

All communications on the subject of the Museum to be addressed to the Superintendent,

B. WOODCROFT.

Great Seal Patent Office,
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B. WOODCROFT.

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THE

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No. 845. FRIDAY, FEBRUARY 7, 1862. Price 2d.

Applications for Letters Patent.

(*4th, 5th, and 6th February*, 1862.)

289. Thomas Mossom Meekins, LL.D., of the Inner Temple, Esquire, Barrister-at-Law, and of 44, Chancery Lane, in the county of Middlesex, for an invention of "The production of a projectile and explosive force, and of a motive power."—Dated 4th February, 1862.

290. George Manwaring, of Southampton, in the county of Hants, Engineer, for an invention of "Improvements in flushing apparatus for closets, sewers, and other water services."—Dated 4th February, 1862.

291. Charles Marien Roullier, of Paris, Manufacturer, for an invention of "Certain improvements in the mode of employing waste leather."—Dated 4th February, 1862.

292. Paul Gardilanne, of Dax, in the department of the Landes, in the empire of France, Gentleman, for an invention of "Improvements in the metallic closing of hoop iron mechanically twisted with simple and double buttons and simple and double chains into wire fencing."—Dated 4th February, 1862.

293. James Lee Norton, of No. 38, Belle Sauvage Yard, Ludgate Hill, in the city of London, for an invention of "Improvements in beating, stretching, and drying fabrics, and in the apparatus employed therein, part of which apparatus is also applicable for thrashing linseed."—The result partly of a communication to him from abroad by William Aldon, of 28, Boulevart Bonne-Nouvelle, Paris, in the empire of France, and partly of invention and discovery made by himself.—Dated 4th February, 1862.

294. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the manufacture of hard and soft soaps, and in washing linen and other textile materials."—A communication to him from abroad by Leo Bachellerie, of Paris, France.—Dated 4th February, 1862.

295. John Greenwood, of Portland Mills, Bradford, in the county of York, Worsted Spinner, for an invention of "Improvements in means or apparatus for preparing and combing wool and other fibres."—Dated 4th February, 1862.

296. Welburn Wilks Williamson, of High Holborn, in the county of Middlesex, Mechanical Engineer, for an invention of "Improvements in apparatus for drying clothes and fabrics."—Dated 4th February, 1862.

297. James Webster, of Birmingham, in the county of Warwick, Engineer, for an invention of "Improvements in gas fittings."—Dated 4th February, 1862.

298. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of iron and steel."—A communication to him from abroad by John Gardner and Henry Richard Gardner, both of the city and state of New York, in the United States of America.—Dated 4th February, 1862.

299. Daniel Gallafent, of 15, Stepney Causeway, in the county of Middlesex, Engineer, for an invention of "Certain improvements in the mode or modes of generating or producing elastic vapours to be used as a motive power."—Dated 5th February, 1862.

300. William Edward Taylor, of Enfield, near Accrington, in the county of Lancaster, Cotton Spinner and Manufacturer, for an invention of "Certain improvements in carding engines."—Dated 5th February, 1862.

301. John King, of Chadshunt, in the county of Warwick, Farmer, for an invention of "Improvements in lubricators for lubricating the moving parts of machinery."—Dated 5th February, 1862.

302. Edward Fisher Smith, of Dudley, in the county of Worcester, Agent, and Thomas Swinnerton, of Dudley aforesaid, Blast Furnace Manager, for an invention of "Improvements in the manufacture of coke, and in kilns or ovens for the manufacture of coke."—Dated 5th February, 1862.

303. John Browning, of the Minories, in the city of London, Optician, for an invention of "Improvements in aneroid barometers."—Dated 5th February, 1862.

304. Henry Ashworth, of Littleborough, in the county of Lancaster, Manufacturer, for an invention of "Certain improvements in machinery or apparatus employed in spinning cotton and other fibrous substances."—Dated 5th February, 1862.

305. Edward Harrison, of Oldham, in the county of Lancaster, Schoolmaster, for an invention of "A certain compound or certain compounds to be used as a substitute for gunpowder."—Dated 5th February, 1862.

306. William Campion and Henry Johnson, both of the town and county of the town of Nottingham, Sewing and Stitching Machine Manufacturers, for an invention of "Improvements in machinery or apparatus for making the welts of hose or other articles made of looped or knitted fabrics, applicable also for other purposes."—Dated 5th February, 1862.

307. Jesse Lee, of Church Gate, in the borough of Leicester, Engineer, for an invention of "Improvements in traction engines."—Dated 5th February, 1862.

308. John Bellamy Payne, of Chard, in the county of Somerset, Engineer and Lace Manufacturer, for an invention of "Improvements in the treatment or preparation of hemp, flax, and other analogous fibrous substances for spinning."—Dated 5th February, 1862.

309. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "An improvement in fire arms."—A communication to him from abroad by Caleb Hannum Bradley and Gideon Miles, of West Chester, Pennsylvania, United States of America.—Dated 5th February, 1862.

310. Charles Calow, of Newton Heath, near Manchester, in the county of Lancaster, Pattern Maker, and John William Hirst, of the city of Manchester aforesaid, Machinist, for an invention of "Improvements in slide valves for steam-engines and other similar purposes."—Dated 6th February, 1862.

311. Adam Carlisle Bamlett, of Middleton Tyas, near Richmond, in the county of York, Farmer, for an invention of "Improvements in reaping and mowing machines."—Dated 6th February, 1862.

312. James Pitkin, of Clerkenwell, in the county of Middlesex, Philosophical Instrument Maker, for an invention of "An improvement in aneroid barometers."—Dated 6th February, 1862.

313. Robert Russell, of Derby, in the county of Derby, Stove Grate Manufacturer, for an invention of "Improvements in stove grates and kitchen ranges."—Dated 6th February, 1862.

314. Robert Shortrede, of Brighton, in the county of Sussex, Colonel in Her Majesty's Indian Army, for an invention of "Improvements in the construction of ships of war with armour plates."—Dated 6th February, 1862.

315. Peter Hyde Astley, of No. 4, Matthew's Place, Stratford, Essex, and Crosby Leighton, of 3, Manby Grove, Manby Park, Stratford, Essex, for an invention of "Improving the floating of vessels, which is applicable to life boats, ships' boats, gun boats, or floating vessels."—Dated 6th February, 1862.

316. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in obtaining and applying motive power, and raising and forcing fluids, and in apparatus employed therein."—A communication to him from abroad by Louis Coignard, of 33, Boulevart Saint Martin, Paris, France.—Dated 6th February, 1862.

317. Edward Cooper Willis, of Addison Road, Kensington, in the county of Middlesex, Bachelor of Medicine, for an invention of "Improvements in the treatment of wax and other substances of a similar nature."—Dated 6th February, 1862.

318. Edward Taylor Bellhouse, of Manchester, in the county of Lancaster, Engineer, and William John Dorning, of the same place, Engineer, for an invention of "Improvements in the construction of hydrostatic presses suitable for packing and compressing cotton and other materials."—Dated 6th February, 1862.

319. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the preparation of pulp for paper."—A communication to him from abroad by Paul Emile Mollet, of Paris, in the empire of France.—Dated 6th February, 1862.

320. John Tonkin, the younger, of Pool, in the parish of Illogen, in the county of Cornwall, for an invention of "Improvements in the manufacture of gunpowder.'—Dated 6th February, 1862.

321. John Dearman Dunnicliff, of Nottingham, for an invention of "Improvements in the manufacture of lace or net bonnet fronts and other similar articles, and in apparatus used in this manufacture."—Dated 6th February, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2438. To Etienne Reoche, of Rue d'Enghien, Paris, in the empire of France, Chemist, for the invention of "A new medicinal preparation applicable internally for rheumatism and other disorders."

On his petition, recorded in the Office of the Commissioners on the 30th day of September, 1861.

2935. To Thomas William Davenport and Samuel Cole, of Balsall Heath, in the county of Worcester, Manufacturers, for the invention of "Improved compositions to be used in making buttons, beads, miniature and picture frames, and other articles susceptible of being moulded in a plastic material."

On their petition, recorded in the Office of the Commissioners on the 22nd day of November, 1861.

2942. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "An improved apparatus for the multiplication of motive power."—A communication to him from Eugène Constant Marie Bonnier, a person resident at Ile Bourbon (Indian Sea).

On his petition, recorded in the Office of the Commissioners on the 23rd day of November, 1861.

34. To James Howden, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in steam engines and boilers."

On his petition, recorded in the Office of the Commissioners on the 4th day of January, 1862.

59. To Charles William Siemens, of 3, Great George Street, in the county of Middlesex, for the invention of "Improvements in the means and apparatus employed for insulating and protecting telegraph conducting wires, and in apparatus for working the same."—The result partly of a communication from abroad by Dr. Werner Siemens, of Berlin, in the kingdom of Prussia, and partly of an invention and discovery made by himself.

68. And to Benjamin Thompson, of Birmingham, in the county of Warwick, Merchant, for the invention of "Improvements in ordnance and fire arms, and in projectiles to be used therewith."—A communication to him from abroad by Edward Heaton, of Newhaven, in the state of Connecticut, in the United States of America, Gentleman.

On both their petitions, recorded in the Office of the Commissioners on the 9th day of January, 1862.

74. To Frederick Moores, of Warrington, in the county of Lancaster, Iron Merchant, for the invention of "An improved method of obtaining motive power by means of water wheels."

On his petition, recorded in the Office of the Commissioners on the 10th day of January, 1862.

86. To William Wilkinson, of No. 20, Charlotte Street, Fitzroy Square, in the county of Middlesex, Engineer, for the invention of "Improvements in ornamenting and decorating metals, glass, porcelain, parchment and other skins, and in the materials and ingredients employed therefor, also in protecting silver and gold on said materials, and on surfaces or plates of glass or metal, or plates of glass and metal combined, applicable to works of art, furniture, jewellery, and other articles of a useful and ornamental character."

On his petition, recorded in the Office of the Commissioners on the 11th day of January, 1862.

102. To Ebenezer William Hughes, of No. 22, Parliament Street, in the city of Westminster, Civil Engineer, for the invention of "Improvements in malleable cylinders used in engineering and architectural structures."

110. And to Josiah Harris, of Ess Hill House, Newton Abbot, in the county of Devon, for the invention of "An improved semaphore target marker."

On both their petitions, recorded in the Office of the Commissioners on the 14th day of January, 1862.

114. To Thomas Timmins, General Castor, of Birmingham, in the county of Warwick, and Thomas Simmons, Doctor of Medicine, also of Birmingham aforesaid, for the invention of "An improved bath, combining in itself the advantages of the hot air or Turkish bath with the vapour, slipper, hot and cold water shower bath."

116. And to Henry Duncan Preston Cunningham, of Bury, near Gosport, in the county of Hants, Esquire, for the invention of "Improvements in means or apparatus for protecting screw propellers from entanglement or being fouled by ropes or other bodies, also improvements in means or apparatus for closing up the screw aperture."

On both their petitions, recorded in the Office of the Commissioners on the 15th day of January, 1862.

117. To John Brooke, of Leeds, in the county of York, Engineer, for the invention of "Improvements in the form of lubricators."

121. And to William Tristram, of Bolton, in the county of Lancaster, Manufacturer, for the invention of "Certain improvements in power looms for weaving."

On both their petitions, recorded in the Office of the Commissioners on the 16th day of January, 1862.

125. To John Martin Rowan, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in the construction of steam hammers."

127. To Nathan Thompson, of 55, St. Paul's Road, Camden Town, in the county of Middlesex, for the invention of "Improvements in apparatus for stopping bottles."

129. And to Robert Romaine, of Devizes, in the county of Wilts, Agricultural Engineer, for the invention of "Improvements in apparatus to be used in cultivating land by steam power, and in steam boilers used for agricultural and traction purposes."

On their several petitions, recorded in the Office of the Commissioners on the 17th day of January, 1862.

131. To Thomas Emmott, of the Vale Mills, Oldham, in the county of Lancaster, Manufacturer, and Joseph Travis, of the same place, Salesman, for the invention of "Improvements in the manufacture of velvets, velveteens, and other similar piled fabrics."

133. To Edward Davies, of Warrington, in the county of Lancaster, Gentleman, for the invention of "Improvements in apparatus for gauging and cutting soap."

134. To William Helme, of Caldbeck, in the duchy of Cumberland, for the invention of "A new or improved fire-lighter."

135. And to James John Stevens, of Darlington Works, Southwark, in the county of Surrey, for the invention of "Improvements in 'point' indicators for railways."

On their several petitions, recorded in the Office of the Commissioners on the 18th day of January, 1862.

143. To Thomas William Jobling, of Point Pleasant, in the county of Northumberland, Colliery Viewer and Mining Engineer, for the invention of "Improvements in the adaptation of locomotive engines to traction or haulage in mines."

147. To Edward Chambers Nicholson, of The Atlas Works, Locksfields, in the county of Surrey, Manufacturing Chemist, for the invention of "Improvements in the preparation of colours suitable for dyeing and printing."

148. And to John Washington Agnew, of the city of London, in West Canada, but at present of Windsor Chambers, Great Saint Helens, in the city of London, Gentleman, for the invention of "A new or improved kind of last capable of being adjusted to various sizes and to various shapes of toes."—A communication to him from abroad by Samuel Slater, of the city of London, in West Canada aforesaid.

On their several petitions, recorded in the Office of the Commissioners on the 20th day of January, 1862.

151. To John Adams Knight, of No. 4, Symond's Inn, Chancery Lane, in the county of Middlesex, Patent Agent, for the invention of "Improvements in the permanent way of railways."—A communication to him from abroad by Hiram Carpenter, of the city of New York, in the United States of America.

152. To Jean Furcy Tourrier, of 41, Manchester Street, Manchester Square, in the county of Middlesex, for the invention of "An improved method of, and apparatus for, warming adjoining houses by means of air chambers attached to grates in the party walls dividing such houses."

153. To Christopher Binks, of Gray's Inn, in the county of Middlesex, for the invention of "Improvements in generating steam, in superheating steam, and in apparatuses employed therein."

155. To Henry Bernoulli Barlow, of the city of Manchester, Patent Agent, for the invention of "Improvements in machinery or apparatus for counting and indicating the number of revolutions of shafts or other articles, and for exerting power."—A communication to him from abroad by Arnold Caflisch, of Winterthur, in the republic of Switzerland.

157. To James Hyndford Rawlins, of Hope Paper Mills, near Wrexham, for the invention of "Improvements in machinery used in the manufacture of paper."—A communication to him from abroad by Oliver Woodworth, resident at New London, Connecticut, United States of America."

158. To Alfred Joseph Martin, of High Street, Bow, in the county of Middlesex, Chemist and Druggist, for the invention of "Improvements in the treatment of fusel oil, and for various applications of the same to useful purposes."

159. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in street and road sweeping machines, parts of which are applicable to the separation of liquid from solid substances."—A communication to him from abroad by Victor Ferdinand Jeauneau, of Cosne, France.

161. And to Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in the mode of and apparatus for applying electricity to horology."—A communication to him from abroad by François Victor Guyard, of 33, Boulevart Saint Martin, Paris, France.

On their several petitions, recorded in the Office of the Commissioners on the 21st day of January, 1862.

163. To Louis Martin, Chemist, residing in Paris, No. 13, Rue Gaillon, for the invention of "Improvements in the treatment of mineral oils, and in the apparatus connected therewith."

165. To Francis William Gerish, of East Road, City Road, in the county of Middlesex, Engineer, for the invention of "Improvements in printing presses.

166. To Edmund Pace, of Queen Street, in the city of London, Manufacturer, for the invention of "Improvements in laths for Venetian blinds, in painting such laths, and in raising and lowering Venetian blinds."

167. And to Alfred James Beer, of Canterbury, in the county of Kent, Engineer, for the invention of "Improvements in the valves of steam and other motive engines."

On their several petitions, recorded in the Office of the Commissioners on the 22nd day of January, 1862.

172. To John Wallace, of Haldane's Mill, near Alexandria, in the county of Dumbarton, North Britain, Smith and Agricultural Implement Maker, for the invention of "Improvements in reaping machines."

174. To William Hooper Ropes, of Crown Court, Old Broad Street, in the city of London, Merchant, for the invention of "Improvements in machinery or apparatus for cleaning coffee, rice, or any seed or grain, having an outer hull and inner pellicle."—A communication to him from abroad by William Maxwell Greene, of Tongoi, Chili, South America, Merchant.

176. To George Rogers, of Staines, in the county of Middlesex, Plumber, for the invention of "Improved mechanical arrangements for letting-off water or other liquids from butts, vessels, or cisterns."

177. To John Creswell Johnson, of the town of Nottingham, Lace Maker, for the invention of "Improvements in the manufacture of twist lace in twist lace machines."

178. To Abraham Ripley, of Brook Street, Lambeth, in the county of Surrey, Engineer, for the invention of "Improvements in the construction of pistons."

179. To Henry Yates, of Cecil Street, Strand, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in machinery for bending, repairing, or renewing defective or damaged parts of iron rails."

180. And to James Gowans Service, of Glasgow, in the county of Lanark, North Britain, Manufac-

turer, for the invention of "Improvements in machinery or apparatus for cutting and scoring pasteboard and other similar material."

On their several petitions, recorded in the Office of the Commissioners on the 23rd day of January, 1862.

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181. To Alexander William Williamson, Ph.D., F.R.S., of University College, London, for the invention of "Improvements in tubulous boilers or steam generators."

182. To James Higgin, of the city of Manchester, Cotton Merchant, for the invention of "Improvements in machinery for retarding and stopping railway carriages."

183. To John Cornforth, of Birmingham, in the county of Warwick, Manufacturer, and Benjamin Smith, of Birmingham aforesaid, Machinist, for the invention of "New or improved machinery for boring or drilling gun-barrels and tubes and other articles having a cylindrical or prismatic figure, which said machinery may also be applied to other like purposes."

184. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the manufacture of artificial flowers, leaves, and fruit." —A communication to him from abroad by Joseph Dominique Alphonse Favier, of 29, Boulevart St. Martin, Paris, Artificial Flower Maker.

185. To John Longhurst, of Ticehurst, in the county of Sussex, Gentleman, for the invention of "Improvements in chains and chain cables."

186. To James Rock the younger, of Hastings, in the county of Sussex, Carriage builder, for the invention of "Improvements in common road carriages."

187. To John Ward Girdlestone, of Birkenhead, in the county of Chester, Gentleman, for the invention of "Improvements in projectiles for fire arms."

189. To Charles Godfrey Hall, of Regent Street, in the county of Middlesex, for the invention of "Improvements in the manufacture of boots, shoes, and leggings."

190. To Arthur Wallis and Charles Haslam, of Basingstoke, in the county of Southampton, Engineers and Ironfounders, for the invention of "Improvements in thrashing machines."

191. And to John Alison, of Brightland, Reigate, in the county of Surrey, for the invention of "Improvements in apparatus for tilling land by steam power."

On their several petitions, recorded in the Office of the Commissioners on the 24th day of January, 1862.

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192. To Whitmore Baker, of Downham, in the county of Norfolk, Surgeon Dentist, for the invention of "Improvements in fire-arms, adapted to prevent their accidental discharge."

193. To William Johnston, of Glasgow, in the county of Lanark, North Britain, Metal Merchant, for the invention of "Improvements in lamps."

195. To Jean Claude François Mougin, of Paris, France, for the invention of "Improvements in barcelonnettes or cradles for children or for dolls."

197. To Dickinson Edleston, of the firm of Holmes and Company, of Halifax, in the county of York, Dyer and Finisher, and Henry Gledhill, of the same place, Finisher, for the invention of "Improvements in means and apparatus for finishing textile and other fabrics."

198. To Edwin Augustus Curley, of 4, Green Terrace, New River Head, Clerkenwell, in the county of Middlesex, Gentleman, for the invention of "Certain improvements in sewing machines."

199. To John Wright, of Rochester, in the county of Kent, Civil Engineer, for the invention of "Improvements in constructing works below water."

200. To François Joseph Lalmand Lefort, of Bothey, in the kingdom of Belgium, for the invention of "Improved mechanical arrangements constituting a secret and invisible safety lock applicable to iron safes and other depositories."

201. To Frederick Roberts, of Maiden Newton, and Alexander Roberts, of Frome Vauchurch, both in the county of Dorset, for the invention of "Improvements in apparatus for ploughing or cultivating land."

203. And to Alexander Samuelson, of 28, Cornhill, in the city of London, Engineer and Iron Ship Builder, for the invention of "Improvements in hydraulic presses, and in the mode of working the same."

On their several petitions, recorded in the Office of the Commissioners on the 25th day of January, 1862.

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206. To Samuel Alfred Carpenter, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "An improvement or improvements in covering and combining strips or bands of steel for crinoline or crinoline skirts."

207. To Ralph Martindale, of Handsworth, in the county of Stafford, Gentleman, for the invention of "Improvements in globes and glasses to be used with hydro-carbon lamps."

208. To Charles Weightman Harrison, of Lorimer Road, Walworth, in the county of Surrey, Engineer, for the invention of "Improvements in printing, stamping, embossing, perforating, and other like operations, and in the machinery or apparatus employed therein."

209. To William Orr, of Greenock, in the county of Renfrew, North Britain, Sugar Refiner, for the invention of "Improvements in machinery or apparatus for the manufacture of sugar."

210. To Joseph Smith, of Spring Row, in Keighley, in the county of York, Machinist, for the invention of "Improvements in the construction of covered rollers used in machinery for preparing, roving, spinning, twisting, and doubling fibrous materials."

212. And to Thomas John Robotham, of Burslem, Chemist, and Nathan Hackney, of Hanley, Agent, both in the county of Stafford, for the invention of "Improvements in purifying slip, glaze, and other potters' materials."

On their several petitions, recorded in the Office of the Commissioners on the 27th day of January, 1862.

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216. To James Hankins, of the city of Bristol, Stone Mason, for the invention of "A new composition or wash to be applied to marine and other steam boilers to prevent incrustation."

217. To JOHN HUNT, of Birmingham, in the county of Warwick, Brassfounder, for the invention of "An improvement or improvements in the manufacture of gas and other chandeliers."

220. To ARTHUR HERBERT CHURCH, of 170, Great Portland Street, in the parish of Saint Marylebone, in the county of Middlesex, Chemist, for the invention of "Improvements in the means of preserving stone, brick, slate, wood, cement, stucco, plaster, whitewash, and colour wash from the injurious action of atmospheric and other influences, also in the application of colours to the surfaces of stone, brick, slate, wood, cement, stucco, mortar, clay, plaster of paris, plaster, whitewash, and colour-wash, and in the retention of such colours thereon."

221. To CHARLES CULLING, of Downham Market, Norfolk, for the invention of "Improvements in fire-arms."

223. To GEORGE HENRY MORGAN and EDWARD MORGAN, both of Grand Junction Terrace, Edgeware Road, in the county of Middlesex, for the invention of "Improvements in carriages."

224. To GEORGE CHAPMAN, of Rutland Street, Leicester, for the invention of "Improvements in rotating circular knitting frames."

225. And to GUSTAVE JOSEPH NICOLAS DE RIDDER, of No. 57, Rue Pigalc, in the city of Paris, in the empire of France, Engineer, for the invention of "Improvements in railway carriages for the conveyance of travellers and goods."

On their several petitions, recorded in the Office of the Commissioners on the 28th day of January, 1862.

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230. To THOMAS CLAYTON, Mechanic, and WILLIAM SMITH, Overlooker, both of Knowlwood, near Todmorden, in the county of Lancaster, for the invention of "An improved flyer."

232. To LOUIS ALEXANDRE PULVÉ, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, Iron Chest Builder, for the invention of "Improvements in fireproof iron chests and strong boxes."

240. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the boxes for the journals of railroad carriage and other axles."—A communication to him from abroad by Davis Henry Dotterer, of Chicago, in the county of Cook, state of Illinois, United States of America.

242. And to MATTHEW COLLIER, of Failsworth, in the county of Lancaster, Manufacturer, for the invention of "Improvements in looms for weaving."

On their several petitions, recorded in the Office of the Commissioners on the 29th day of January, 1862.

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246. To EDWARD ALEXANDER RIPPINGILLE, of Staple Hill, near Bristol, for the invention of "Improvements in engines worked by steam or other fluid, and in pumps."

248. To HENRY ROBOTTOM and RICHARD UNDERWOOD, both of 31, Robert Street, Hoxton New Town, in the county of Middlesex, Watch Manufacturers, for the invention of "Improvements in watches and pocket chronometers."

250. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in mechanical wrenches."—A communication to him from abroad by Messrs. Pierre Augustin Samuel and Auguste Toussaint Ozon-de-Verrie, both of 29, Boulevart St. Martin, Paris.

252. And to ADOLPHUS LAHOUSSE, of Brussels, in the kingdom of Belgium, Mechanician, for the invention of "Improvements in the manufacture of wheels for waggons, locomotive engines, and other vehicles used for railway purposes."

On their several petitions, recorded in the Office of the Commissioners on the 30th day of January, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

NOTICE is hereby given, that the petition of

298. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, praying for Letters Patent for the invention of "Improvements in the manufacture of iron and steel,"—a communication to him from abroad by John Gardner and Henry Richard Gardner, both of the city and state of New York, in the United States of America,—was deposited and recorded in the Office of the Commissioners on the 4th day of February, 1862, and a complete specification acompanying such petition was at the same time filed in the said office.

Notice of Application for Prolongation.

NOTICE is hereby given, that JOHN GRAHAM, of Berners Street, Oxford Street, in the county of Middlesex, and SAMUEL LAHEE, of Bond Street, in the same county, Assignees of Letters Patent for an invention of "Improvements in apparatus and machinery for giving shape and configuration to plastic substances," granted to CHARLES HANCOCK, on the 29th day of July, 1848, intend to apply, by petition, under the 4th Section of the Statute 5th and 6th William the 4th, chap. 83, to Her Majesty in Council for a prolongation of the term of sole using and vending the said invention granted by the said Letters Patent; And notice is hereby further given, that the said JOHN GRAHAM and SAMUEL LAHEE intend to apply by Counsel to the Judicial Committee of the Privy Council on the 17th day of March next, or if the said Judicial Committee shall not sit on that day at the then next sitting of the said Judicial Committee, for a time to be fixed for hearing the matter of their said Petition; and that on or before the said 17th day of March next notice must be given of any opposition intended to be made to the said petition, and any person intending to oppose the said application must lodge a caveat to that effect at the Council Office on or before that date.—Dated this 1st day of February, 1862.

BEVAN and WHITTING,
6, Old Jewry, London,
Solicitors to the above-named John Graham and Samuel Lahee.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

5th February, 1862.

1948. William Galloway and John Galloway, of the city of Manchester, Engineers, and John William Wilson, of Barnsley, in the county of York, Timber Merchant, for an invention of "Improvements in steam boilers and in apparatus connected therewith."—Dated 6th August, 1861.

7th February, 1862.

1968. John Eastwood and Thomas Charles Eastwood, both of Marshall Mill, Manchester Road, Bradford, in the county of York, Machine Wool Combers, for an invention of "A new kind of yarn, being a combination of refuse and waste matters of fibrous materials, and the said fibrous materials, and the cloth woven therefrom."—Dated 8th August, 1861.

1993. Alexander Southwood Stocker and Alexander Richmond Stocker, both of Wolverhampton, in the county of Stafford, Manufacturers, for an invention of "Improvements in the manufacture of horse shoes, boot heels, wheel tyres, rails, and safes."—Dated 10th August, 1861.

1995. William Saint Thomas Clarke, of Charing Cross, Westminster, in the county of Middlesex, Gentleman, for an invention of "Improvements in railway breaks."—Dated 10th August, 1861.

2004. Aaron Salomons, of Old Change, in the city of London, Manufacturer, for an invention of "A bodice skirt or a new or improved article of female apparel."—A communication to him from abroad by Gerard Higgins, of New York, United States of America.—Dated 12th August, 1861.

2008. John Caspar Horner, of Avenue Road, Hammersmith, near the city of London, Consulting Engineer, for an invention of "Certain improvements in looms for weaving."—A communication to him from abroad by Frederick May, of the firm of Escher Wyss and Company, of Zürich, in the republic of Switzerland.—Dated 13th August, 1861.

2009. Joseph Jacob, of Brünn, in the empire of Austria, but at present residing in Golden Square, (W.), London, in the county of Middlesex, for an invention of "Improvements in producing on porcelain and other ceramic products on glass, Venetian enamels, and on metallic surfaces, designs in colors and in gold, silver, and other metals."—A communication to him from abroad by Franz Kosch, of Vienna, in the empire of Austria.—Dated 13th August, 1861.

2011. Samuel Andrew and Stephen Hornby, of Staley Bridge, in the county of Lancaster, Machinists, for an invention of "Improvements in machinery or apparatus for opening, cleaning, and preparing cotton and other fibrous materials."—Dated 13th August, 1861.

2012. Jacques Guillaume Remy, of the city of Brussels, in the kingdom of Belgium, for an invention of "Improvements in the manufacture of articles of furniture by utilizing certain parts of the cedar tree in such manufacture, which have heretofore been considered and treated as waste."—Dated 13th August, 1861.

2024. Edmund Edwards, of 13, Beaufort Buildings, Strand, London, in the county of Middlesex, for an invention of "Improvements in machinery or apparatus for separating mineral ores, coal, and other substances from impurities."—Dated 14th August, 1861.

2032. John Cowdery Martin, of High Street, Barnes, in the county of Surrey, Naval Architect, for an invention of "An improvement in treating bones, and the manufacture of the products thereof."—Dated 15th August, 1861.

2036. Spendlove Desborough, of Noble Street St. Martins-le-Grand, in the city of London, Manufacturer, for an invention of "Improvements in the manufacture of umbrellas and parasols."—Dated 15th August, 1861.

2692. Charles Stevens, of 31, Charing Cross, in the county of Middlesex, Patent Agent, for an invention of "Improved apparatuses for indicating escapes of lighting gas from the conveying pipes, and determining the precise leaking places of the said pipes."—A communication to him from abroad by Charles Antoine Fornier, of Paris, in the empire of France.—Dated 26th October, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 5th February*, 1862, *inclusive.*)

4th February.

333. Robert Tinkler, of Penrith, in the county of Cumberland, Churn Manufacturer, for an invention of "Improvements in churns."—Dated 5th February, 1859.

380. Benjamin Burrows, of Leicester, for an invention of "Improvements in looms for weaving narrow fabrics."—Dated 10th February, 1859.

5th February.

383. James Evans, of Tarlton Street, Liverpool, in the county of Lancaster, Coach Builder, for an invention of "An improvement in 'Hansom' cabs."—Dated 11th February, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

5th February, 1862.

441. George Mackay Miller, of Inchicore, county of Dublin, Civil Engineer, and John Wakefield, of the same place, Engineer, for an invention of "Improvements in pistons for engines driven by steam or other elastic fluid, which improvements are also applicable to the pistons or plungers of reciprocating pumps."—Dated 28th February, 1855.

FOREIGN PATENTS.



UNITED STATES OF AMERICA.

(Communicated by the Commissioner of Patents.)

LIST of PATENTS, with claims annexed, issued from the United States Patent Office, for the week ending 7th January, 1862, and each bearing that date.

No. 34,045. CHARLES ALEXANDER, of Washington, D.C., for an "Improved camp candlestick."

"I claim the within-described combined cup and candlestick as an article of manufacture, the same being constructed substantially as and for the purpose herein set forth."

No. 34,046. STEPHEN J. BABBITT, of Hacketts-town, N.J., for an "Improved wash board."

"I claim the wash board A, provided with a rubbing piece *a*, corrugated or fluted at both sides, and fitted between the stiles or side pieces *b*, *b*, as shown, in combination with the rubber B, applied to the wash board, and provided with knobs or semi-spherical projections *d*, as and for the purpose set forth."

No. 34,047. H. W. BALL, of New York, N.Y., for an "Improved table and camp chest."

"I claim the arrangement and construction of the hooks *d*, sockets *e*, detachable legs D, and hooks E, with each other and with the divided table top C, and camp chest A, so as to operate together as set forth."

No. 34,048. S. G. BLACKMAN, of Waterbury, Conn., for an "Improvement in lamps."

"I claim as an improved article of manufacture a cone or deflector for lamp tops composed of metal and mica or other suitable transparent substance substantially as herein described."

No. 34,049. G. W. BONHAM, of Henry, Illinois, for an "Improved pulverizer and seed sower."

"I claim, first, the pulverizers *v*, arranged on the shaft *d*, in respect to each other, when constructed and operating in the manner and for the purpose specified. I claim, second, arranging the seed box *c* in the frame *a*, on pivots *k*, so that the driver can throw the feeder in and out of gear by the screw *l*, arranged at the side of his seat, as set forth. I claim, third, attaching the front truck to the front part of the frame *a*, and arranging it in relation thereto so that the dip of the pulverizers can be regulated by the screw *g*, and handle *h*, in front of the driver's seat as set forth."

No. 34,050. P. W. BURNETT, of Sacramento, California, for an "Improvement in railroad switch."

"I claim the arrangement of the pivoted beveled levers M, M, G, G, and grooved levers H, H, with the pendants J, shafts I, I, L, L, rods *b*, *b*, *c*, *c*, lever K, shafts E, cam D^1, and switch rails B, B, as herein shown and described. The arrangement of the slotted adjustable pendants N with the curved arms $c\times$ $d\times$, pins $f\times$, shoulders $e\times$, and shafts *b*, as herein shown and described."

No. 34,051. ANDREW D. CAMPBELL and ELBERT PERCE, of New York, N.Y., for an "Improvement in casks for holding oil, quicksilver, &c."

"We claim, first, the use and application of any compound containing silica to impregnate the pores and crevices of wood or other porous or fibrous materials, suitable for the construction of barrels or vessels for holding quicksilver, petroleum, or hydrocarbon fluids, and to fill the joints of said barrels or vessels, in combination with a lining of cloth, paper, or other suitable fabric glued to the interior of barrels or vessels, and coated with any compound containing silica to render them impervious to the penetrating action of quicksilver, petroleum, or hydrogcarbon fluids, in the manner above set forth. Second, we claim specifically the impregnation of wood or other materials suitable for the construction of barrels or vessels for holding quicksilver, petroleum, or hydrocarbon fluids, either before or after such vessels or barrels are made with any solution containing silica, by means of heat and pressure, for the purpose above set forth. Third, we claim specifically the application of a lining of cloth, paper, or other suitable fabric glued to the interior of barrels or vessels for holding quicksilver, petroleum, or hydro-carbon fluids, and coated with any solution containing silica, for the purpose above set forth."

No. 34,052. GEORGE D. DENISON, of Troy, Ohio, for an "Improved grain register."

"I claim the combination of the box A, skids B, B^1, worm shaft G, arms *h*, wheel E, index *e*, and dial I, constructed, arranged and operating substantially as herein shown and explained, and for the purpose specified."

No. 34,053. D. A. FISKE, of Milwaukie, Wis., for an "Improvement in vapor lamp."

"I claim the arrangement of the removable cap G, and the bundle of wires H, filling the tube of said cap, in combination with the cup R, also the manner of supporting the globe M by means of the stem O and the socket L, in combination with the method of attaching and detaching the globe-supporter W, by means of the screw P, substantially in the manner as and for the purposes hereinbefore described."

No. 34,054. M. P. GARDNER, of Huntington co., Indiana, for an "Improvement in mill stone dressing."

"I claim the construction and use of the rule, as described and seen in fig. 3 of drawings hereunto annexed to determine and mark out for cutting parallel lines of dress, so that in running they may perfectly coincide one with the other as to run more steadily, and cut the grain evenly and uniformly,"

No. 34,055. JAMES E. GILLESPIE, of Trenton, N.J., for an "Improved hydraulic governor."

"I claim the use of a rotatory pump F, G, H, in combination with a perforated cylinder M, N, and piston P, for the purpose of regulating the speed of engines, substantially as above described, and for the purpose set forth. I also claim the use of the reciprocating zigzag bar 2, 3, 4, 5, in combination with the excentric X, and the piston P, substantially as above described, and for the purposes herein set forth."

No. 34,056. EDWIN GOMEZ, of New York, N. Y., for an "Improvement in firing cannon by attached fusee."

"I claim the perforated fusee clamped to the cannon, mortar or similar article at the touch hole, for the purposes and substantially as set forth."

No. 34,057. EDWIN GOMEZ, of New York, N. Y., for an "Improvement in the construction of trains or fusees."

"I claim, first, a flat or tape fusee formed of an explosive compound enclosed in a strip of folded paper protected by a winding of string or an envelope of gutta percha or other suitable material. Second, I claim the longitudinal strings or cords *d*, *d*, in combination with the said flattened or tape fusee, in the manner and for the purposes specified. Thirdly, I claim the manner herein set forth of uniting lengths or sections of tape fusee by the notching or lapping, as specified."

No. 34,058. B. B. HOTCHKISS, of Sharon, Conn., for an "Improvement in canister shot for ordnance."

"I claim, first, the employment of the inner case C, divided longitudinally, substantially as and for the purpose described. Second, I claim the attaching of a bag H to the base B, so as to be capable of folding within the recess therein, and of being unfolded when wanted for use, substantially as herein shown."

No. 34,059. WILLIAM W. HUBBELL, of Philadelphia, Pa., for an "Improvement in explosive shells for ordnance."

"I claim, first, the vent '15' opposite and nearly or quite at right angles to the base of the chamber '4,' to receive and

dischage the fire as quiek as possible, and deliver the water direct on the base of the chamber to diffuse it in the best manner, as described. Second, also I claim expanding the fire in an enlarged chamber around the mouth of the burning column, so as to secure a large body of fire to ensure the explosion of the shell, as deseribed. Third, I also claim combining the percussion exploder with the burning fuze by securing the eylinder 'F' to the inner end of the fuze stock, and providing it with the head for the striker inside of the eylinder, so as to unite the percussion and the fuze prineiples for explosion, as described. Fourth, I also claim the lead stopper '*r*' inserted in and secured to the inner end of the fuze stock by screw threads or similar means, as and for the purpose described, and also forming the chamber or space '*t*' between this stopper and the burning column, as described. Fifth, I also claim the chamber '*q*' and its opening '*p*' between the head 'M' and the fuze column, as described. Sixth, I also claim the lead or metallic stopper '*z*, *z*' in the metal base or groove eovering the holes '*x*,' and releasing on concussion to explode the projectile, as described. Seventh, I elaim the fire-chambered water eapping combined with the eylindrical fuze opening or stock carrying the burning eolumn with eylinder opening at the inner end to hold the fire and explode the shell on impact, as deseribed. Eighth, I claim the adjustable metallie timing rod (W) in the burning column or near its side, to adjust the fuze to explode the projectile at any instant of time, as described. Also I claim the strand of quick match '*u*' in its lower end to raise and lead the fire down on time, as described. Ninth, I claim the fire ehamber '4' in the capping between the water table or plate '2,' and the capping vent, formed by eombining them, to prevent extinguishment of the fuze, as described. Also I elaim the raise l vent '3' of the water table into the chamber as described, to increase its eapacity to exclude water. Also I claim the ehamber (1) between the vent '3' and the orifice of the column '*v*,' as described. Tenth, I elaim forming an enlarged or priming chamber '7' around or by the side of the timing rod, to insure an ignition of the fuze by presenting a large priming surface for the smaller vent, and allow the timing rod to extend through the eapping and be adjusted without interfering with the priming, as described. Eleventh, I elaim the file euts or fracturing points on the side of the timing rod, so as to break it off without the use of an instrument, in adjusting the time in aetion, as deseribed. And I also claim the quick or double three or four threaded screw on the timing rod, to adjust it quickly as described."

No. 34,060. Henry Isham, of New Britain, Conn., for an "Improvement in water meters."

"I claim the combination of the following elements, viz., first, the radial vanes on a vertical shaft. Second, the surrounding case provided with a tangential induction pipe or passage, and with a central discharge at the bottom. And, third, the registering mechanism or the equivalent thereof, substantially as and for the purpose described. And I also claim the flexible diaphragm and vibrating lever attached to it, in combination with the shaft of the rotating vanes, and with the registering mechanism, substantially as and for the purpose specified."

No. 34,061. A. K. Johnston, of Middletown, Conn., and L. Dow, of Topeka, Kan., for an "Improvement in envelopes of cartridges for fire-arms."

"We elaim, as an article of manufacture, the envelope of a cartridge constructed as above described, and for the purposes set forth."

No. 34,062. William R. King, of Yellow Springs, Ohio, for an "Improved apparatus for evaporating and distilling."

"I claim the combination of the water space C and tubes *a*, *a*, around and above the furnace, with the evaporating pan situated in the upper part of said water space, substantially as and for the purpose specified. I also claim constructing the evaporating pan with a plain bottom, and diamond shaped pipes or passages N, N, connected by partition plates above the bottom, so as to form a flue space K, therein, substantially in the manner and for the purpose described. I also claim the combination of the steam pipes or passages N, N, and their connecting pipes *n*, *n*, with the evaporating troughs M, M, and their connecting openings *m*, *m*, substantially as described, so that the steam and sirup or liquid flow side by side together through their whole course, in the manner and for the purpose herein specified. In combination with these steam pipes or passages and troughs, arranged as described, I also claim the strainers *p*, *p*, removable as specified, for the purposes set forth. I also claim the combination of the receiving vessel H, having a strainer *h* therein with the heating vessel G, in such a manner as to receive the clear liquid therefrom through a pipe J, below, and the impure liquid therefrom through a spout *i* (or its equivalent), above said strainer, for the purpose specified."

No. 34,063. Israel L. Landis, of Manheim township, Pa., for an "Improvement in lifting jacks."

"I claim the screw cap C, with its central neck or elongation, and surrounding cogs, in combination with the double footed or clawed base I, and friction pulleys K, on the base of the screw shaft B, together with the case R slotted on both sides, arranged and operated as described and shown in the drawings. I also claim the adjustable winch or crank M, N, when the same is provided with two sliding elasps *m*, *n*, peg *t*, holes S, and spring P, in combination with its application to either axis *g*, *h*, of the cogged wheels G, H, as shown and described for the purposes specified.

No. 34,064. Daniel Lasher, of Brooklyn, N.Y., for an "Improvement in furnace grates."

"I claim forming the grate bars for furnaces of boilers, &c. with the series of openings *c*, *c*, crosswise of the bar as specified, and so that these bars when placed together have longitudinal openings between the bars as set forth."

No. 34,065. T. Mayhew, of Poughkeepsie, N.Y., for an "Improvement in lamps."

"I claim elevating the chimney F, perpendieularly through the medium of the rods or guides D, D, substantially as and for the purpose herein set forth."

No. 34,066. John McLain, of St. Mary, Ohio, for an "Improved automatic fan."

"I claim, first, the particular arrangement of the crank *k*, rod *m*, arm *n*, projecting from the fan shaft I, for operating the fan shaft from the fusee *i*, as set forth in connection with the brake *o*, arranged to act against the cylinder *g*, substantially as and for the purpose set forth. 2nd, the attaching of the stand or upright B to the base A, by means of the slotted plate *b*, or tube *a*, and the arbor and pin *c*, *d*, at the lower end of the upright B, when said parts thus connected are used in combination with a removable box C, or block *f*, and the cup D, substantially as described."

No. 34,067. Daniel Moore, of Brooklyn, N. Y., for an "Improvement in revolving fire arms."

"I claim the employment, in a eylinder with chambers open at the rear, of rifling at the forward end of each chamber corresponding with the grooves in the barrel, for the purposes and as specified." I also claim the band or ring 2, having the recesses 3, 3, for the stop lever or bolt, the said ring being formed as and for the purposes specified."

No. 34,068. James A. Morrell, of St. Charles, Missouri, for an "Improvement in pumps."

"I claim the employment of one or more sliding cylinders having valves suitably arranged in them, opening upwards, in combination with a stationary main pipe C, connecting rods *g*, *g*, and the eccentrics G, G, on the driving shaft H, all arranged and operating substantially as and for the purposes herein described."

No. 34,069. Arthur Neill, of Boston, Mass., for an "Improved combined knife, fork, and spoon."

"I claim as a new article of manufacture, the combination made and operating substantially in the manner herein described, viz.:—the spoon formed with a case or protector sufficient to receive the fork and knife blade, and the knife or fork so formed as to complete a suitable receptacle for the bestowal of the third implement."

No. 34,070. Gilman M. Palmer, of Clinton, Mass., for an "Improvement in mode of attaching car wheels to axles."

"I claim, first, the use of the collar (C) or its equivalent, whether forged with the axle or shrunk upon it or attached to it by any other means, in combination with the wheel (D) and the hub (F) or their equivalents, in the manner and for purposes substantially as described. Secondly, the use of the cap (*c*) or its equivalent in combination with the wheel D, the space (*g*) and the collar (C) or their equivalents in the manner and for the purposes substantially as specified. Thirdly, the collar (E) or its equivalent, in combination with the screw (*d*), the space (*f*), and the hub F, or their equivalents, in the manner and for the purposes substantially as specified. Fourthly, the cap (*a*) or its equivalent, in combination with the collar (E), the screw (*d*), the wedge (*h*), and the shield (*l*), or their equivalents, in the manner and for the purposes substantially as herein set forth. Fifthly, the use of the screw (*d*) or its equivalent in combination with the collar (E) and the wheel (D) with its hub (F) or their equivalents, in the manner and for the purposes substantially as specified. Sixthly, the use of the wedge (*h*) or its equivalent, in combination with the screw (*d*) and the collar E, or their equivalents, in the manner and for the purposes substan-

tially as specified. Seventhly, the shield (*l*) or its equivalent in combination with the space (*e*), the collar (E), and the hub (F), or their equivalents, in the manner and for the purposes substantially as specified."

No. 34,071. J. and E. C. Nichols and D. Shepard, of Battle Creek, Michigan, for an "Improvement in grain separators."

"We claim the arrangement of the shoe D, the rock shaft T, rods R^1, R^2, the separating and conducting frames G, H, operated in different directions by means of the crank shaft J and its connections, together with the agitating fingers, the several parts operating conjointly for the separation of grain from the straw as is herein specified."

No. 34,072. Herman Pietsch, of New York, N.Y., for an "Improved gold and silver amalgamator."

"I claim the construction of the amalgamator with an induction pipe B, higher than the eduction orifice, a tight horizontal box A, hooked partitions D, zigzag top E, and inclined divided eduction orifice C, all arranged as herein shown and described."

No. 34,073. George B. Skinner, of Damascus, Pa., for an Improved water wheel."

"I claim uniting the outer cylinder A to the inner one D, by a series of spiral buckets B, that leave an open space C, between themselves and the cylinder D, substantially in the manner and for the purpose herein described."

No. 34,074. Richard P. Smith and Jos. R. Gates, of Louisville, Ky., for an "Improvement in mole plows."

"We claim the drawing plow Fig. 4, provided with a press wheel *o*, with a concave periphery when used in combination with the double spool capstan, constructed as set forth, for the purpose of under-draining."

No. 34,075. David J. Stagg, of New York, N.Y., for an "Improved device for closing doors."

"I claim the combination of the hinged bars or strips C, C, and the weight or weights G, arranged and applied to the door as and for the purpose set forth."

No. 34,076. S. C. Stetson, of North Bridgewater, Mass., for an "Improvement in straw and hay cutters."

"I claim the arrangement of the right angular bar *i*, *k*, ratchet wheel *k*, and bar *w*, operating together as described."

No. 34,077. W. O. Strong, of Detroit, Michigan, for an "Improvement in weighing registers."

"I claim the travelling bar T, with the angular pieces I and K attached, in combination with the pin wheel 'W' or its equivalent, and springs, either spiral or otherwise, working substantially in the manner and for the purpose set forth."

No. 34,078. William A. Sweet, of Syracuse, N.Y., for an "Improvement in scroll saws."

"I claim, first, the combination of the adjustable cylinder K, the valve and wind chest D, the valve V, the saw head F, the saw B, and the adjustable slides F and X, substantially as and for the purposes described. Second, I claim the loose cylinder K, when adjusted substantially as specified, so as to form a yielding hold, down upon the stuff, both by its own weight and atmospheric pressure, for the purposes substantially as described. Third, I claim attaching the cylinder K by the set screw *z*, in order to obtain a 'rake adjustment,' substantially as set forth. Lastly, I claim combining the cylinder K (enclosing the saw head) with the auxiliary frame work and set screw *z*, or its equivalent, and slotted arms o^1, o^1, and set screws *o*, *o*, for the purpose of attaining both a lateral and rake adjustment of the saw, substantially as and for the purposes described."

No. 34,079. Asahel F. Ward, of Philadelphia, Pa., for an "Improvement in telegraphing by colors."

"I claim the use of a table or key composed of squares arranged as set forth for the purpose specified."

No. 34,080. William S. Thompson, of Rochester, N.Y., for an "Improvement in lamps."

"First, I claim the means, substantially as described of preventing the escape of vapor from the wick through the opening left for the ratchet wheels, whereby all danger of explosion is obviated. 2d, In combination with the means recited in the first claim, I claim the arrangement herein described of the cap C, burner B, and ratchet wheel *d*.

No. 34,081. Robert Welch, of Frankford, Pa., for an "Improvement in sewing machines."

"I claim, 1st, feeding the thread to the needle of the sewing machine by means of a shaft L, rotated by positive connection with the cloth feeding mechanism substantially as and for the purposes set forth. 2nd, the use in connection with a shaft L, actuated as above set forth of a cone M, provided with a number of grooves *c*, *c*, to vary the feed of the thread in accordance with varying thicknesses of material to be sewed."

No. 34,082. Amos Westcott, of Syracuse, N.Y., for an "Improvement in churns."

"I claim, 1st, the employment of the diagonal float wheels, *b* and *b*, *b*, in combination with the shaft and dasher paddles *c*, *c*, *c*, *c*, constructed essentially as and for the purpose above described. 2d, the combination of the diagonal float wheel, *b*, *b*, with the diaphragm Fig. 3, and chamber Fig. 4, constructed as and for the purpose above described. 3d, also trough *f*, and *f*, *f*, in combination with the chamber, diagonal float wheels, and dasher paddles, above described."

No. 34,083. H. P. Westcott, of Seneca Falls, N.Y., for an "Improvement in paneling machines."

"I claim the combined arrangement of the spring pressure guide L, constructed and operating as described, the stationary guide B, and separately adjustable disks or cutter-heads D, D, substantially as and for the purposes herein specified. I also claim the construction and arrangement of the cutters *g*, *g*, with round axial shanks *m*, *m*, projecting at right angles from the planes of the cutters motion, and fitting into the sockets of the disks or cutter heads D, D, in positions parallel with the axis of the said disks, thus producing the angular and axial adjustments thereof, substantially as and for the purposes herein specified."

No. 34,084. F. G. Woodward, of Worcester, Mass., for an "Improvement in breech loading fire arms."

"I claim the movable breech piece B, constructed with a recess *b*, *b*, groove *g*, and recess *s*, fitted with a hammer D, main spring *k*, screw H, and handle B^1, and having a segment screw connection with the breech, all substantially as herein described and applied, to operate in combination with the trigger I, and with notch *t*, and stud *r*, of the breech supporter, substantially as herein set forth."

No. 34,085. John Amidon, of Springfield, Mass., assigner to himself and L. Streeter, of same place, for an "Improvement in harness buckles."

"I claim, as a new article of manufacture, a harness buckle constructed substantially as herein described."

No. 34,086. Edward Brown, of South Reading, Mass., assignor through mesne assistant to B. D. Godfrey, of Milford, Mass., for an "Improvement in boots and shoes."

"I claim the double india rubber sole, formed as described the edge of the outer sole being turned up to conceal the edge of the middle sole for the purpose set forth."

No. 34,087. M. R. Clapp, of Seneca Falls, N.Y., assignor to himself and Edward Mynderse, of same place, for an "Improvement in steam fire engines."

"I claim the combination and arrangement of two steam cylinders the pistons of which move simultaneously in opposite directions, with the pump of a steam, fire, or other portable engine, substantially in the manner and for the purposes herein described."

No. 34,088. Lansing Marble, of Vassar, Michigan, assignor to himself and Townsend North, of same place, for an "Improvement in baskets."

"I claim, as an improved article of manufacture, a basket formed of two series of overlapping splints A, A^1, extending from side to side, secured by hoops and rivets, and having a conical bottom B, with central bolt or rivet *d*, and otherwise made substantially as herein shown and described."

No. 34,089. E. W. Pierce and W. J. Clark, of Southington, Conn., assignors to W. J. Clark and Co., of same place, for an "Improved soldier's cot."

"I claim, 1st, the employment or use of the bow or equivalent shaped bars A, in combination, with the jointed rods C, and canvas B, arranged substantially as and for the purpose set forth. 2nd, having the pieces *b* of the rods C at the head of the cot, curved as shown at *c*, in order to form a pillow of the canvas at that point as set forth. 3rd, the adjustable bars *f*, *f*, attached to the head bar A of the cot, when said bars are used in connection with the series of bars or supports A and jointed rods C, as set forth."

No. 34,090. W. Delbitt, of Cleveland, Ohio, for an "Improvement in harvesters."

"I claim the adjustable slotted cam latch or key E, connected to the machine at or near the heel of the finger bar, and operated in combination therewith, by means of the lever L, in the manner and for the purpose specified."

No. 34,091. Barton S. Alexander, of U. S. army, for an "Improved projectile for rifled ordnance."

"I claim the mode of making the two or more parts of a compound shot adhere together by the use of tin, solder, or any other metallic compound, to which a rim of lead when cast between those parts will adhere. 2nd, I claim the hole *k*, and the plug *l*, as a means of relieving the pressure caused by the compressed air, or other confined substance between the two parts of the shot, and tending to separate them, as herein described."

No. 34,092. Manasseh Grover, of Clyde Village, Ohio, for an "Improvement in ploughs."

"I claim the draught beam C, fastened by a hinge joint arranged and operating substantially as and for the purpose herein-before set forth."

No. 34,093. William Jones Pitt, Middletown, Conn., for an "Improvement in revolving fire arms."

"I claim, 1st, the combination and arrangement of the screw H, recoil shield E, lever F, and rack and pinion J, *h* or their equivalents, substantially as herein set forth. 2nd, I also claim the arrangement of the spring L, thimble K, and pin D, in and with the stock A, substantially as and for the purpose herein specified."

No. 34,094. Robert Ramsey, of New Wilmington, Pa., for an "Improvement in bechives."

"I claim, 1st, the combination of the slide B, reversible sliding door *b*, and gauze covered aperture b^2, all arranged as herein-before explained, and for the purposes specified. 2nd, I claim the specific combination of the grooved bars H, H, movable bars I, and sliding sleves K, constructed and employed in the manner and for the purposes set forth."

No. 34,095. James C. Stock, and James E. Emerson, of Trenton, N. J., for an "Improved process for making steel."

"I claim the manufacture of tools, cutlery, or other articles by first casting the articles in the proper forms of iron with which a suitable quantity of the oxyd of maganese has been combined, then converting into malleable iron by decarbonization, but without changing their shape; and afterwards converting them into steel, by recarbonizing them to the requisite extent by heating in an air tight pot or other receptacle with vegetable charcoal, all as herein-before explained."

No. 34,096. John Wade, of Richmond, Indiana, for an "Improved convertible cane and stool."

"I claim, 1st, the extended division A, in combination with divisions B and C, in the manner and for the purpose substantially as set forth. Second, I claim the combination and arrangement of the divisions A, B, and C, cap *f*, de**k** **n**t *i*, spring *j*, and angle-iron T, in the manner and for the purpose set forth."

No 34,097. Theodore D. Davis, of Syracuse, and John M. Waldren, of South Otselic, N.Y., for "Improvements in harvesters."

"We claim securing movable blades in dovetail grooves in the cutter bar by means of a tapering rod C, operating in connection with lugs *a* and protuberences *b*, substantially as explained."

No. 34,098. J. W. Hardie, of New York, N.Y., and A. S. Hayward, of Boston, Mass., assignor to said A. S. Hayward, of Boston, Mass., and James B. Ogden, of New York, N.Y., for an "Improved combination of knife, fork, and spoon."

"We claim forming the handle of the knife A of a single piece of metal, with the blade in such a shape as to receive therein the fork and spoon handles, in combination with the formation of the fork and spoon handles, so as to pack securely therein, substantially as herein specified."

No 34,099. John J. Althause, of New York, N.Y., for an "Improvement in plastering surfaces."

"I claim a metallic plastering surface, substantially such as described, for piers, columns, &c., produced during and by the operation of casting, substantially in the manner herein-before set forth."

No. 35,000. John H. Balsley, of Dayton, Ohio, for an "Improved step ladder."

"I claim the employment of the supports A, A, the braces D, and the horizontal rods connecting front and back of ladder, together with the supports F, F, braces *g*, *g*, and hinged cross tie G, arranged, connected, and operating as and for the purpose specified."

No. 35,001. Warren S. Bartle, of Newark, N.Y., for an "Improvement in pumps."

"I claim the combination of the hollow piston rod B, copped or closed at the upper end, the valve E, and head D, with the cylinder in which they act, constructed and arranged substantially as described."

No. 35,002. George H. Bruce, of Lancaster, N.Y., for an "Improvement in bridges."

"I claim, first, the combination of a truss bridge frame with an arch bridge frame, so as to combine the strength of the two frames in one bridge, substantially as set forth. Second, I also claim the tongued wedge D in combination with the contiguous grooved ends of each pair of principal rafters, in the manner and for the purpose substantially as described."

No. 35,003. Wm. Burnett, of Boston, Mass., for an "Improvement in gun stocks."

"I claim providing a musket or other like fire arm furnished with a sword or bayonet, with a suitable hand hold at or near the breech, substantially as and for the purpose herein specified."

No. 35,004. John Chandler, of Collinsville, Conn., for an "Improvement in machinery for cleaning emery wheels."

"I claim the employment or use of a water box or tank B, supplied with one or more rollers C, in combination with one or more sliding frames E^1, for holding the wheels G to be cleaned, all being arranged substantially as and for the purpose set forth."

No. 35,005. Geo. Collins and Enoch Piper, of Camden, Maine, for an "Improvement in pumps."

"We claim a pump having a cylinder A constructed of glass, with its ends fitted in metallic heads B, C, as shown, in combination with the piston E, formed of two metallic parts *i*, *j*, perforated as shown, and provided with the packing F and valve *m*, and connected together by the screw and nuts, all arranged as set forth."

No. 35,006. Geo. H. Cook, of New Brunswick, N.Y., for an "Improvement in composition for lining tobacco pipes."

"I claim the use of the above described composition for the lining of tobacco pipes."

No. 35,007. Jacol Dennis, of Marion, Iowa, for an "Improved washing machine."

"I claim the adjustable bottom (B), and the rubber D, when both are constructed, arranged, and operated in the manner and for the purpose specified."

No. 35,008. Adam Eckerson and J. H. Reury, of Pleasant Brook, N.Y., for an "Improved washing machine."

"We claim, 1st, the semi-circular disks C, C¹, having corrugations on their inner faces, and fitted loosely on a bar passing longitudinally through the box, with the handles D, D, the round bar B, spiral springs *g*, *h*, and oblong semi-circular box A, when combined, arranged, and operating as described. 2nd, the longitudinally sliding disks C, C¹, round bar B, spiral springs *g*, *h*, box H, pulleys *e*, *f*, treadle E, and cords *c*, *d*, when combined and arranged in the manner and for the purpose set forth."

No. 35,009. Jno. A. Fanshawe and Jas. A. Jaques, of London, Eng., for an "Improved brush."

"We claim as an improved article of manufacture a brush or scrubber having continuous concentric or convolute rubbing edges, made as herein shown and described."

No. 35,010. Geo. W. Gilbert, of Bettsville, Ohio, for an "Improvement in churns."

"I claim the arrangement of the hollow staff E, follower F, valve *a*, and lever D, in combination with the partition B, and loose balls G, G, all constructed, combined, and operating in the manner and for the purpose herein-before explained."

No. 35,011. Geo. P. Gordon, of Brooklyn, N.Y., for an "Improvement in printing presses."

"I claim, first, the use or employment of a paper tympan sheet, operating substantially as set forth for the purpose specified. Second, the combination of the nipper arms provided with the nippers, with the vibrating platen, operating substantially as described for the purpose described. Third, the combination of the nippers and gripers with the nipper arms; also these with the vibrating platen. Fourth, the combination of the nippers and nipper arms with a tympan sheet, operating substantially as described; also these with a vibrating platen. Fifth, the combination of the nippers and nipper arms with the feed table, operating substantially as described for the purpose specified. Sixth, the combination of the feed-table with gauges, constructed and operating substantially as described for the purpose set forth. Seventh, the combination of the stationary bed and the revolving ink distributing table with the platen, operating substantially as described. Eighth, operating the vibrating inking roller arms or roller frame by or through the motion of the vibrating platen. Ninth, operating the nipper arms provided with the sheet-taking nippers by or through the motion of the vibrating platen. Tenth, the combination of the ink distributing table or discs, or a single ink distributing table or disc, the ink distributing cylinder, and the rocking roller frame, for the purpose described. Eleventh, combining the double revolving ink distributing tables or discs with the ink distributing cylinder. Twelfth, in combination with the springs (8) and roller frame, the sliding rods (7) holding and carrying the inking rollers as shown. Thirteenth, raising the nippers when taking or delivering a sheet to such a height above the face of the platen that the relative position of the vibrating platen and the feed-table shall allow the platen to vibrate freely under the feed-table substantially for the purpose set forth."

No. 35,012. Thomas S. Lambert, of Peekskill N. Y., for an "Improvement in tourniquets."

"I claim, first, the application of the elastic band in combination with a pad for producing pressure on arteries in the manner set forth. 2nd, the combination of an elastic band in combination with a non-elastic one, and with the pads for securing them in place and for making pressure, in the manner set forth. 3d, the application of the wings to the pads so as to permit collateral circulation, in the manner set forth. 4th, the attachment of the wings by hinges to the pads, in the manner set forth. 5th, the checks on the wings to prevent the bands from slipping, in the manner set forth. 6th, the combination of the pads with the wings and inelastic bands for the purpose of making pressure on blood vessels, in the manner set forth."

No. 35,013. Hiram Litteljohn, of Troy, N.Y., for an "Improved clothes frame."

"I claim the arrangement of the vertically movable toothed rack F, in combination with the pivoted radial arms A, provided with toothed segments E, and connected together by clothes-lines B, substantially as herein set forth."

No. 35,014. Theodore Marschall, of New York, N.Y., for an "Improvement in pianofortes."

"I claim the employment for the purpose specified of the rings *c* and screws *d*, applied in the manner shown and described."

No. 35,015. Loomis G. Marshall, of San Francisco, California, for an "Improved amalgamator."

"I claim the combination of trough Y, adjusting slide Z, metallic surface plates X, W, of two inclined tables, batteries *b* of the upper table, and compartments and sinks *h* of the lower table, all the parts arranged in relation to each other as above described, so that a galvanic current may be made to pass over both tables and all the batteries *b*."

No. 35,016. J. Mc. Clusky, of Milwaukie, Wis., for an "Improved apparatus for submarine attack on enemy's vessels."

"I claim, 1st, the grappling apparatus, consisting principally of two levers E, E, a grappler F, windlasses D, D, and G, chains *e*, *e*, *f*, the whole combined and applied to a boat in combination with a drill or boring device substantially as herein specified. 2nd, The employment, as the stock for the drill or other boring tool, of a tube charged like a cannon for the expulsion of the said tool, substantially as herein specified."

No. 35,017. John Mc. Evoy, of New York, N. Y., for an "Improvement in hospital knapsacks."

"I claim as an article of manufacture a hospital knapsack for the use of army surgeons, composed of a body of wicker work, provided with partitions and doors arranged substantially as described, and covered with leather or any proper waterproof cloth or material substantially as set forth."

No. 35,018. Peter W. Nefus, of New York, N.Y., for an "Improvements in water closets."

"I claim, 1st, working the valves K, and L, and W, by the handle or rod D, or its equivalent, as herein recited. 2nd, operating the lower valve independant of the upper one, with the same handle as described. 3d, I claim the combination of the valves K and L, rod D, raising water-valve box E, and closet valve A, as herein set forth."

No. 35,019. A. Phillipi and D. Moore, of Elizabethport, N.Y., for an "Improvement in railroad switches."

"We claim the loose switch bar, with sloped ends moving in the slotted rail, and receiving both the flange and tread of the wheel when attached to the shaft B, and connected with lever and springs, and moved by the train while passing, as described, and for the purposes set forth."

No. 35,020. Moses Pond, of Boston, Mass., for an "Improvement in stoves."

"I claim, first, the two ovens E and F, each having separate and independent flues from the same fireplace, in combination with the openings *r* and *s*, and their slides *t*, operating as described, and for the purposes specified."

No. 35,021. Thomas S. Clogston, of Boston, Mass., assignor to himself and Horace P. Wakefield, of Reading, Mass., for an "Improvement in kitchen ranges."

"I claim, 1st, the combination of a cubical fire-box with the three water legs of the boiler in contact with the three surfaces of the said fire box, as described, so that two of said water legs shall be interposed between the fire and the ovens, to moderate the heat thereof, substantially as set forth. 2nd, the arrangement and combination of an oven between three water legs of the boiler on three of its sides, while the two flues from the fire box pass over the top of said oven, and thence down its farthest side to the bottom of the water legs, and thence around by the outside and to the rear, substantially as described. 3rd, the oscillating tubular grate in kitchen ranges, constructed and operating substantially as set forth. 4th, the combination of the stationary part P with the oscillating grate, substantially as set forth."

No. 35,022. James P. Ellicott, of Washington, D. C., for an "Improved refrigerator."

"I claim a rotating refrigerator sub-divided into four or more compartments, as is herein described, combined and arranged with the pin K, and under frames L, M, and pulleys N, N, substantially and for the purpose specified."

No. 35,023. Geo. E. Vandenburgh, of Mameroneck, N.Y., assignor to Liquid Quartz Company, of New York, N.Y., for an "Improvement in forming emery wheels and grinding surfaces."

"I claim, first, employing the liquid silicate, which is referred to in the body of this specification, as the cementing material in the process of producing artificial stone suitable

for cutting, grinding, and other purposes. Second, after any properly prepared gritty or cutting substance has been incorporated with such a proportion of the above-mentioned liquid silicate as will produce a pasty substance, I claim the putting of said pasty substance into any desired shape by moulding and pressure. Third, I claim the curing and toughening of the said moulded articles of gritty paste by first subjecting them to the action of a moderate degree of heat for the purpose of drying the same, and then subjecting the said articles to the actions of a higher temperature by the aid of a sand bath or some other analogous heating apparatus."

Re-issues.

No. 1253. Robert H. Long, of Philadelphia, Pa., for an "Improved arrangement of steam engines for propelling street passenger cars."—Patented 4th January, 1860; re-issued 15th January, 1861.

"I claim the arrangement of the steam engine and boiler relatively to each other and upon the platform of a railway car or other carriage, substantially in the manner herein specified."

No. 1254. Robert H. Long, of Philadelphia, Pa., for an "Improved arrangement of steam engines for propelling street passenger cars."—Patented 4th January, 1860; re-issued 15th January, 1861.

"I claim transmitting the power of the engine to the driving axle by means of a driving pinion F attached to the frame of the engine, and arranged relatively to the driving axle, to operate substantially as herein specified."

No. 1255. L. J. W. S. and Cyrus H. McCormick, of Chicago, Ill., assignors to said C. H. McCormick, of same place, for an "Improvement in reaping and mowing machines."—Patented 11th May, 1858; re-issued, No. 273, 5th June, 1860.

"I claim, first, the combination of arms (*n*, *o*,) or their equivalent, with the frame, pinion wheel, and driving wheel of a reaping or mowing machine, so that at one end said arms or equivalent shall vibrate or turn on or around the axis of the pinion wheel, which gears into and receives motion from the master cog wheel, and at the other end be properly connected with the axle or journal of the driving wheel, in such manner, that by shifting adjustable fastenings, the height of the frame and cutting apparatus of the machine relatively to that of the driving wheel, can be varied without affecting the gearing of the machine, substantially as described. Second, the combination of the arm or plate connection of the driving wheel with the frame of the machine, substantially as described, or the equivalent thereof, with gearing for changing the velocity and direction of the motion generated by the driving and master wheels, and communicating the same to the cutter. Third, the combination of said arm or plate connection with an adjustable wheel on the opposite side of the machine for raising and lowering the cutting apparatus to suit required changes in the height of cutting grain and grass."

No. 1256. L. J. W. S. and Cyrus H. McCormick, of Chicago, Ill., assignors to said C. H. McCormick, of same place, for an "Improvement in reaping and mowing machines."—Patented 11th May, 1858; re-issued, No. 973, 5th June, 1860.

"I claim, first, the combination of the segmental arms or their equivalent having notches or holes for adjustment with the frame of the machine and adjusting bolt or its equivalent, so as to raise and lower the frame and cutting apparatus, and hold them in any desired position, substantially as set forth. Second, holding the segmental arms or their equivalent to the frame of the machine, by means of the hooked head of the bolt or detent in the notches of the sectors, substantially as shown and described."

Designs.

No. 1508. E. J. Cridge, of Troy, N.Y., for a "Design for plates of a stove."

No. 1509. Robert Ham, of Troy, N.Y., assignor to Smith, Sheldon, and Co., of same place, for a "Design for a cook's stove."

No. 1510. Luther W. Harwood, of Troy, N.Y., assignor to Philo. P. Stewart, of same place, for "Parlour stove plates."

No. 1511. David Hathaway, of Troy, N.Y., assignor to Fuller, Warren, and Co., of same place, for a "Design for a cook's stove plates."

No. 1512. David Hathaway, of Troy, N.Y., assignor to Fuller, Warren, and Co., of same place, for a "Design for an oven stove."

No. 1513. Thomas H Wood, of Utica, N.Y., and Henry S. Hubbell, and Alfred S. Hubbell, of Buffalo, N.Y., for a "Design for a stove."

No. 1514. Thomas H. Wood, of Utica, N.Y., and Henry S. Hubbell, and Alfred S. Hubbell, of Buffalo, N.Y., for a "Design for a cook's stove."

No. 1515. Thomas H. Wood, of Utica, N.Y., and Henry S. Hubbell, and Alfred S. Hubbell, of Buffalo, N.Y., for a "Design for a cook's stoves."

No. 1516. James Williams, of Philadelphia, Pa., assignor to L. M. Williams and Co., of same place, for a "Design for trade mark."

Erratum in Journal of 4th February, 1862.

3202. For "George Tomlinson" read "George Tomlinson Bousfield."

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Applications for Letters Patent.

(*7th, 8th, and 10th February*, 1862.)

322. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in stereoscopic albums, books, and cases."—A communication to him from abroad by Louis François Saugrin, of Paris, France.—Dated 7th February, 1862.

323. John Lloyd, of Donnington, in the county of Shropshire, Engineer to the Lilleshall Iron Company, for an invention of "Improvements in buffers for engines and carriages on railways."—Dated 7th February, 1862.

324. Peter Shaw, of the city of Edinburgh, Gentleman, for an invention of "Improvements in lamps."—Dated 7th February, 1862.

325. Hugh Adams Silver, of Silvertown, in the county of Essex, Manufacturer, for an invention of "Improvements in the manufacture of trays, cases, and other similar articles and bottles in ebonite, vulcanite, or other hard india rubber."—Dated 7th February, 1862.

326. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "An improved portable thrashing and winnowing machine and apparatus for working same by horse power."—A communication to him from abroad by Alexandre François Sevrin, of No. 15, Passage des Petites Ecuries, Paris, France.—Dated 7th February, 1862.

327. Alexander McKenzie, of Glasgow, in the county of Lanark, North Britain, Engineer, and Francis Panthel, of the same place, Machinist, for an invention of "Improvements in sewing machines."—Dated 7th February, 1862.

328. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in preserving timber, which are particularly applicable to the timbers of ships or other maritime structures."—A communication to him from abroad by Mr. Henri De Lapparent, of 29, Boulevart St. Martin, Paris, in the empire of France, Director of Naval Constructions.—Dated 7th February, 1862.

329. Henry Macaulay and Alphonso Florencio Notley, both of Rotherham, in the county of York, for an invention of "Improvements in fire guards."—Dated 7th February, 1862.

330. William Hamond Bartholomew, of 2, Warwick Villas, Leeds, in the county of York, for an invention of "Improvements in barges or vessels suitable for the navigation of canals and rivers."—Dated 7th February, 1862.

331. Henry Brinsmead, of Ipswich, in the county of Suffolk, Machinist, for an invention of "Improvements in apparatus for moving, elevating, cleaning, and dressing grain."—Dated 7th February, 1862.

332. John Senior Woodhouse, of Cheapside, in the city of London, Warehouseman, for an invention of "Improvements in hooped skirts."—Dated 8th February, 1862.

333. John Howie, of Hureford Colliery, Kilmarnock, Scotland, Coal Master, for an invention of "Improvements in regulating the consumption of fuel in furnaces."—Dated 8th February, 1862.

334. John Adams Knight, of No. 4, Symonds Inn, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in washing machines."—A communication to him from abroad by the inventor R. P. Wilson, of New York, United States of America.—Dated 8th February, 1862.

335. Frederick Tolhausen, Civil Engineer and Patent Agent, of No. 35, Boulevart Ponne Nouvelle, Paris, in the empire of France, for an invention of "An improved system of manufac-

turing the tyres of railway wheels by hydraulic pressure and steam."—A communication to him from Antoine Duplay, a person resident at No. 17, Rue du Faubourg Montmartre, Paris.—Dated 8th February, 1862.

336. James Webster, of Birmingham, in the county of Warwick, Engineer, for an invention of "An improvement or improvements in the manufacture of certain descriptions of nails, bolts, spikes, and pins."—Dated 8th February, 1862.

337. James Carrington, of Queen's Gate Mews, Kensington, in the county of Middlesex, Groom, for an invention of "Improvements in the construction and fitting up of stalls and horse boxes."—Dated 8th February, 1862.

338. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in the treatment of coprolites and other fossil phosphates of lime."—A communication to him from Guillaume Louis Edouard Buran and Louis Goupy, persons resident at No. 17, Rue du Grand St. Michel, Paris, France.—Dated 10th February, 1862.

339. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Apparatus for the administration of vapour baths."—A communication to him from Eliacin Edouard Pomier (M.D.), a person resident at Egriselles-le-Boccage (Yonne), in France.—Dated 10th February, 1862.

340. James Dickson, of 66, Tollington Road, Holloway, in the county of Middlesex, Gentleman, for an invention of "Improvements in voltaic apparatus and in the production of voltaic electricity."—Dated 10th February, 1862.

341 Richard Philp and John Philp, of Lower John Street, Golden Square, in the county of Middlesex, Civil Engineers, for an invention of "An improvement in propellers for propelling ships, boats, and other vessels in water."—Dated 10th February, 1862.

342. John Busfield, of Bradford, in the county of York, Worsted Spinner, and Jonathan Eastwood, of the same place, Machine Maker, for an invention of "Improvements in machinery or apparatus for preparing wool for dyeing and spinning."—Dated 10th February, 1862.

343. Bedford Clapperton Trevelyan Pim, of the Junior United Service Club, Saint James's, Commander in the Royal Navy, and George Fawcus, of North Shields, in the county of Northumberland, Ship Builder, for an invention of "Improvements in uniting iron plates and in uniting and fixing armour plates on ships and other structures."—Dated 10th February, 1862.

344. Louis Rudolph Bodmer, of 2, Thavies Inn, in the city of London, for an invention of "Improvements in hydraulic oil presses."—Dated 10th February, 1862.

345. George Smith, of Holland Grove, North Brixton, in the county of Surrey, for an invention of "Improvements in shawls."—Dated 10th February, 1862.

346. Joshua Danks, of 56, Webber Row, Waterloo Road, in the county of Surrey, Mat and Matting Manufacturer, for an invention of "Improvements in the manufacture of door mats and hearth rugs."—Dated 10th February, 1862.

347. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in reflectors."—A communication to him from abroad by Mr. Louis Jacques Château, of 29, Boulevart St. Martin, Paris, formerly Notary.—Dated 10th February, 1862.

348. Anthony Munck, Master Mariner, and Helge August Myhre, Watchmaker, both of Berners Street, Oxford Street, in the county of Middlesex, for an invention of "Improvements in ships' logs."—Dated 10th February, 1862.

349. William Clark, of 53, Chancery Lane in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in refining cast-iron, wrought, and other malleable iron, and in the cementation of iron."—A communication to him from abroad by Messrs. Louis Joseph Frédéric Margueritte, Chemist, and Alfred Lalouël de Sourdeval, Proprietor, both of 29, Boulevart St. Martin, Paris.—Dated 10th February, 1862.

Notices to Proceed.

Notice is hereby given, that

2443. John Adams Knight, of No. 4, Symond's Inn, Chancery Lane, in the county of Middlesex, Patent Agent, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in the manufacture of boots and shoes."—A communication to him from abroad by Henry Port, of the city of New York, in the United States of America.

2445. And Robert Nightingale, of Maldon, in the county of Essex, Artist, has given the like notice in respect of the invention of "Improvements in marker's butts or mantclets."

2447. And John William Scott, of the city of Worcester, Button Manufacturer, has given the like notice in respect of the invention of "Improvements in tools for the manufacture of leather and other rings, washers, and laces."

As set forth in their respective petitions, all recorded in the said office on the 1st day of October, 1861.

2455. And James Davis, Iron Master, Ulverstone, in the county of Lancaster, and Thomas Evans, Engine Fitter, Ulverstone, in the county of Lancaster, have given the like notice in respect of the invention of "Improvements in the construction of engines to be worked by steam, air, or gases."

2456. And William Maltby, of De Crespigny Park, Camberwell, county of Surrey, Gentleman, has given the like notice in respect of the invention of "Improvements in the manufacture of starch and starch gum."

2462. And Charles Grey Hill, of Commerce Square, High Pavement, in the town and county of the town of Nottingham, Lace Manufacturer, has given the like notice in respect of the invention of "Improvements in machinery or in apparatus connected therewith in the manufacture of bonnet and cap fronts, rouches, and millinery or other trimmings."

As set forth in their respective petitions, all recorded in the said office on the 2nd day of October, 1861.

2463. And John Charles Dickinson, of Blackburn, in the county of Lancaster, Machine Maker, has given the like notice in respect of the invention of "Certain improvements in steam engines."

2467. And Henry Law, Civil Engineer, of No. 15, Essex Street, Strand, in the county of Middlesex, at present residing at Rio de Janeiro, in the Brazils, has given the like notice in respect of the invention of "Improvements in machinery and apparatus for raising ships and other vessels out of the water, for the purposes of examination, cleaning, or repair, some of which are applicable to the docking of vessels for the same purposes."

2469. And Robert John Ellershaw, of Leeds, in the county of York, has given the like notice in respect of the invention of "An improved machine for expressing oil."

2473. And William Malam, of Skinner Street, in the city of London, Gas Engineer, has given the like notice in respect of the invention of "Improvements in apparatus for the manufacture of gas."

As set forth in their respective petitions, all recorded in the said office on the 3rd day of October, 1861.

2477. And Charles Husson, of Nantes, in the empire of France, Looking Glass Manufacturer, has given the like notice in respect of the invention of "An improved process for silvering looking glass in piles of several sheets superposed without interruption, which process consists in the use of a chemical powder."

2478. And Adolphe David, junior, of Nantua, in the empire of France, has given the like notice in respect of the invention of "Improvements in preparing and fixing street and other inscriptions or lettering on metallic plates."

2480. And George Knox, of Skinner's Place, in the city of London, Paper Manufacturer, has given the like notice in respect of the invention of "An improvement in paper-making machines."

2486. And Joseph Tweedale, of Milkstone, Rochdale, in the county of Lancaster, Machinist, has given the like notice in respect of the invention of "Improvements in machinery for preparing and spinning cotton and other fibrous substances."

As set forth in their respective petitions, all recorded in the said office on the 4th day of October, 1861.

2487. And John Lansley, of Brown-Candover, in the county of Hants, Agricultural Machinist, has given the like notice in respect of the invention of "Improvements in the construction of ploughs, drills, scarifiers, and such like agricultural implements, the said improvements relating to the mode of guiding or steering the same."

2489. And Ebenezer Partridge, of the Patent Axle Works, Smethwick, in the county of Stafford, Axle Manufacturer, has given the like notice in respect of the invention of "Improvements in hardening iron and steel, and a composition or substance to be employed therein."

2492. And John Scott Collins, of Liverpool, in the county of Lancaster, of the firm of Coubrough, Boyd, and Company, Ship Chandlers and Sail Makers, has given the like notice in respect of the invention of "An improved apparatus for reefing and furling the sails of ships and other vessels."

2494. And George Nares, of Portsmouth, in the county of Hants, Lieutenant R.N., has given the like notice in respect of the invention of "An improved method of effecting communication between places otherwise inaccessible to each other, by means of kites and an apparatus connected therewith."

2497. And William Squire, of Upper Montague Street, Bryanstone Square, in the county of Middlesex, Pianoforte Maker, has given the like notice in respect of the invention of "An improved machinery for planing and shaping wood."

As set forth in their respective petitions, all recorded in the said office on the 5th day of October, 1861.

2502. And George Kelson Stothert, of Bristol, has given the like notice in respect of the invention of "Improvements in condensing aparatus."

As set forth in his petition, recorded in the said office on the 7th day of October, 1861.

2506. And Alfred Ford, of the Priory, Battersea, in the county of Surrey, Surgeon, has given the like notice in respect of the invention of "An improved method of forming waterproof fabrics by combining paper with woven or spun fabrics."

As set forth in his petition, recorded in the said office on the 8th day of October, 1861.

2523. And William Palmer, of Sutton Street, Clerkenwell, in the county of Middllesex, has given the like notice in respect of the invention of "Improvements in lamps and lamp wicks."

As set forth in his petition, recorded in the said office on the 9th day of October, 1861.

2539. And Abraham English, of Hatfield, in the county of Herts, Inspector of Rural Police, has given the like notice in respect of the invention of "Improvements in reins or apparatus for preventing harnessed horses from falling."

As set forth in his petition, recorded in the said office on the 10th day of October, 1861.

2548. And Samuel Ratcliffe Carrington, of Stockport, in the county of Chester, Hat Manufacturer, has given the like notice in respect of the invention of "Improvements in hats and caps."

As set forth in his petition, recorded in the said office on the 12th day of October, 1861.

2573. And Francis Bryan Baker, of Sherwood Street, Nottingham, has given the like notice in respect of the invention of "Improvements in dressing or stiffening lace and other fabrics."

As set forth in his petition, recorded in the said office on the 16th day of October, 1861.

2588. And THOMAS WILD, of Heywood, in the county of Lancaster, Cotton Spinner, and THOMAS HODSON, of the same place, Engineer, have given the like notice in respect of the invention of "Certain improvements in the method of, and apparatus for, heating the 'feed-water' for steam boilers, and in employing steam produced by such means."

As set forth in their petition, recorded in the said office on the 17th day of October, 1861.

2632. And JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in apparatus for facilitating the passage of trains up steep gradients on railways."—A communication to him from abroad by Thomas Agudio, of Turin, in the kingdom of Italy, Engineer.

As set forth in his petition, recorded in the said office on the 21st day of October, 1861.

2652. And GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in railways, and in iron pavements and railways combined, parts of which improvements are applicable to the construction of railway chairs, and to cast iron pavements for ordinary streets."—A communication to him from abroad by Barzillai Coat Smith, of Burlington, New Jersey, in the United States of America.

As set forth in his petition, recorded in the said office on the 23rd day of October, 1861.

2727. And JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the city of London, has given the like notice in respect of the invention of "Improvements in apparatus for raising water."—The same is the result partly of a communication from abroad made to him by William Aldon, of 28, Boulevart Bonne Nouvelle, Paris, in the empire of France, and partly of invention and discovery made by himself.

As set forth in his petition, recorded in the said office on the 30th day of October, 1861.

2743. And BENJAMIN MITCHELL, of Greenwich, in the county of Kent, Tailor, and WILLIAM BRUNTON, of Penge, in the county of Surrey, Engineer, have given the like notice in respect of the invention of "Improvements in the construction of scissors and shears."

As set forth in their petition, recorded in the said office on the 1st day of November, 1861.

2855. And WILLIAM HENRY BALMAIN, of St. Helens, in the county of Lancaster, Manufacturing Chemist, and JOHN KEAN, of the same place, Manufacturing Chemist, have given the like notice in respect of the invention of "Improvements in the manufacture of flowers of sulphur, and roll, and other forms of sulphur."

As set forth in their petition, recorded in the said office on the 13th day of November, 1861.

2935. And THOMAS WILLIAM DAVENPORT and SAMUEL COLE, of Balsall Heath, in the county of Worcester, Manufacturers, have given the like notice in respect of the invention of "Improved compositions to be used in making buttons, beads, miniature and picture frames, and other articles susceptible of being moulded in a plastic material."

As set forth in their petition, recorded in the said office on the 22nd day of November, 1861.

3078. And CROMWELL FLEETWOOD VARLEY, of No. 4, Fortess Terrace, Kentish Town, in the county of Middlesex, Electrician, has given the like notice in respect of the invention of "Improvements in electric telegraphs."

As set forth in his petition, recorded in the said office on the 9th day of December, 1861.

3184. And JOSEPH HENRY GEORGE WELLS, of 2, Sandhurst Villas, Binfield Road, Stockwell, in the county of Surrey, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the method of, and apparatus for, pumping elastic fluids."

As set forth in his petition, recorded in the said office on the 19th day of December, 1861.

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24. And EDWARD NUGENT, of Brooklyn, in the county of Kings, and state of New York, United States of America, has given the like notice in respect of the invention of "Improvements in fire-arms."

As set forth in his petition, recorded in the said office on the 3rd day of January, 1862.

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38. And JOHN CORYTON, of Rolls Chambers, 89, Chancery Lane, W.C., Barrister-at-law, has given the like notice in respect of the invention of "An improved type machine."

As set forth in his petition, recorded in the said office on the 6th day of January, 1862.

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69. And HARBY BARBER, of Belgrave, in the county of Leicester, Manufacturer, has given the like notice in respect of the invention of "Improvements in safety lamps."

As set forth in his petition, recorded in the said office on the 9th day of January, 1862.

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127. And NATHAN THOMPSON, of 55, St. Paul's Road, Camden-town, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in apparatus for stopping bottles."

As set forth in his petition, recorded in the said office on the 17th day of January, 1862.

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132. And THOMAS NEWTON, of the city of Manchester, in the county of Lancaster, Gun and Rifle Manufacturer, has given the like notice in respect of the invention of "Improvements in sights for rifles."

135. And JAMES JOHN STEVENS, of Darlington Works, Southwark, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in 'point' indicators for railways."

138. And William Louis Winans, of Baltimore, Maryland, United States of America, but now residing at Brighton, in the county of Sussex, and Kingdom of England, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the manner of mounting, and apparatus for manœuvring, cannon or ordnance on ships or vessels of war and floating batteries."

As set forth in their respective petitions, all recorded in the said office on the 18th day of January, 1862.

225. And Gustave Joseph Nicolas De Ridder, of No. 57, Rue Pigale, in the city of Paris, in the empire of France, Engineer, has given the like notice in respect of the invention of "Improvements in railway carriages for the conveyance of travellers and goods."

As set forth in his petition, recorded in the said office on the 28th day of January, 1862.

298. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of iron and steel." —A communication to him from abroad by John Gardner and Henry Richard Gardner, both of the city and state of New York, in the United States of America.

As set forth in his petition, recorded in the said office on the 4th day of February, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

11th February, 1862.

2027. John Billing, of 12, Abingdon Street, Westminster, in the county of Middlesex, for an invention of "Improvements in stoves."—Dated 14th August, 1861.

2037. Augustin François Menard, of No. 10, Rue de Strasbourg, in the city of Paris, in the empire of France, for an invention of "Improvements in tanning and in the apparatus employed therein."—A communication to him from abroad by Yoes Auguste Rehm, residing at Basse Yutz, department of the Moselle, in the empire of France, Sugar Baker.—Dated 15th August, 1861.

2038. Charles William Kesselmeyer, of Manchester, in the county of Lancaster, Warehouseman, and Thomas Mellodew, of Oldham, in the said county, Manufacturer, for an invention of "Improvements in the manufacture of velvets and velveteens."—Dated 15th August, 1861.

2042. Theophilus Murcott and Charles Hansom, of the Haymarket, in the county of Middlesex, Gun Makers, for an invention of "Improvements in breech-loading arms."—Dated 15th August, 1861.

2043. John Livesey, of New Lenton, in the county of Nottingham, Lace Manufacturer, for an invention of "Improvements in textile fabrics for embroidery, trimmings, and other ornamental purposes, and machinery employed in making the fabrics into trimmings."—Dated 16th August, 1861.

2045. Henry Cheetham Hill, of Stalybridge, in the county of Lancaster, Manager, for an invention of "Improvements in the construction of fireproof buildings."—Dated 17th August, 1861.

2047. Ellis Sutton, of Radcliffe, in the county of Lancaster, Cotton Spinner, for an invention of "Certain improvements in machinery or apparatus for preparing cotton and other fibrous substances for spinning."—Dated 17th August, 1861.

2079. James Ellis, of 62, Minories, in the city of London, Cork Merchant, for an invention of "Improvements in means for sizing corks or separating the larger from the smaller sized corks."—Dated 20th August, 1861.

2103. Thomas Richardson, of Newcastle-upon-Tyne, Chemist, and Robert Irvine, of Hurlet, Renfrewshire, Analytical Chemist, for an invention of "Improvements in the manufacture of paper." —Dated 22nd August, 1861.

2113. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in apparatus for feeding boilers."—A communication to him from abroad by William Lane Chase, of the city and county of Philadelphia and state of Pennsylvania, in the United States of America.—Dated 23rd August, 1861.

2152. Philip Jewell, of Bond Street, Brighton, Musical Instrument Maker, for an invention of "Improvements in concertinas."— Dated 29th August, 1861.

2153. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improved machinery for cleaning rice and other grain."—A communication to him from abroad by Albert Hubbell Wright, of New York, in the United States of America.—Dated 29th August, 1861.

2179. John Macmillan Dunlop, of Manchester, Engineer, for an invention of "Improvements in cleansing cotton seeds, and in machinery used for such process."—Dated 31st August, 1861.

2197. Gustav Bischof, junior, of Swansea, for an invention of "Improvements in extracting copper and silver from ores containing those metals."— Partly a communication from abroad made to him by Dr. Gustav Bischof, senior, Professor of Chemistry and Technology at the University of Bonn, Prussia, and partly of invention and discovery made by himself.—Dated 3rd September, 1861.

2220. Thomas Greenwood, of Leeds, in the county of York, Machine Maker, for an invention of "Improvements in machinery for sawing wood." —Dated 5th September, 1861.

2284. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of

Middlesex, Civil Engineer, for an invention of "Improvements in guns."—A communication to him from abroad by William McCord, of New York, in the United States of America.—Dated 13th September, 1861.

2354. Charles Perman, of Salisbury, in the county of Wilts, for an invention of "Improvements in machinery or apparatus for cutting and turning up the soil of land for cultivation."—Dated 20th September, 1860.

2556. George Twigg, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in clasps or fastenings for stay-busks."—Dated 12th October, 1861.

2576. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improvements in the construction of grain and grass harvesters."—A communication to him from abroad by Edwin Perry Russell and Porter Tremain, of Manlius, Onondaga county, state of New York, United States of America.—Dated 16th October, 1861.

3066. John James Russell, of the Crown Tube Works, Wednesbury, in the county of Stafford, Patent Tube Manufacturer, and Burdett Lambton Brown, of the same place, Engineer, in the employ of the said John James Russell, for an invention of "Improvements in apparatus used in the manufacture of taper tubes."—Dated 6th December, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 7th February*, 1862, *inclusive.*)

6th February.

342. Matthew Curtis, of the city of Manchester, in the county of Lancaster, Machinist, and John Miller, of Stayley Bridge, in the said county, Manager, for an invention of "Improvements in certain mules for spinning cotton and other fibrous substances."—Dated 7th February, 1859.

356. John Baldry Redman, of New Palace Yard, in the city of Westminster, Civil Engineer, for an invention of "An improvement in the construction of carriage ways."—Dated 8th February. 1859.

7th February.

343. Joseph Lee, of 18, Monson Street, Lincoln, for an invention of "Improvements in the manufacture of cranks for steam-engines and other purposes."—Dated 7th February, 1859.

346. John Smith, of Bradford, in the county of York, Machine Maker, for an invention of "Improvements in machinery or apparatus for preparing and combing wool and other fibrous substances."—Dated 7th February, 1859.

406. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in breech-loading fire-arms."—A communication from abroad by James H. Merrill, of the United States of America.—Dated 12th February, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

8th February, 1862.

322. John Ramsbottom, of Longsight, near the city of Manchester, Engineer, for an invention of "Improvements in the construction of certain metallic pistons."—Dated 12th February, 1855.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234 -	A.D. 1852—October to December inclusive
247 -	A.D. 1853—January to March ,,
268 -	,, April to June ,,
291 -	,, July to September ,,
321 -	,, October to December ,,
345 -	A.D. 1854—January to March ,,
371 -	,, April to June ,,
399 -	,, July to September ,,
424 -	,, October to December ,,
451 -	A.D. 1855—January to March ,,
475 -	,, April to June ,,
505 -	,, July to September ,,
527 -	,, October to December ,,
553 -	A.D. 1856—January to March ,,
579 -	,, April to June ,,
605 -	,, July to September ,,
632 -	,, October to December ,,
660 -	A.D. 1857—January to March
684 -	,, April to June ,,
712 -	,, July to September ,,
737 -	,, October to December ,,
761 -	A.D. 1858—January to March ,,
789 -	,, April to June ,,
815 -	,, July to September ,,
842 -	,, October to December ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632 -	A.D. 1852—October to December inclusive
660 -	A.D. 1853—January to March ,,
684 -	,, April to June ,,
712 -	,, July to September ,,
737 -	,, October to December ,,
761 -	A.D. 1854—January to March ,,
789 -	,, April to June ,,
815 -	,, July to September ,,
842 -	,, October to December ,,

FOREIGN PATENTS.

BELGIUM.*

List of Patents of Inventions Delivered on the 31st January, 1862.†

(*Communicated by the Belgian Government.*)

(For previous List, see No. 838 of this Journal.)

11,942. Ad. Lahousse, of Molenbeek St. Jean, for "Manufacture of wheels of railway carriages of wrought-iron and sheet-iron."—Dated 2nd January, 1862.

11,943. A. Leroy, of Brussels, a Patent of Improvement for "A sewing machine."—Dated 2nd January, 1862.—(Original Patent, 5th November, 1861.)

11,944. A. Leroy, of Brussels, a Patent of Improvement for "Modifications in stitches obtained in sewing machines."—Dated 2nd January, 1862.—(Original Patent, 30th October, 1861.)

11,945. S. W. Marsh, represented by Eug. Guillery, of Brussels, for "Improvements in breech-loading fire-arms."—Dated 2nd January, 1862.

11,946. Lecomte, represented by X. Raclot, of Brussels, for "Grates for furnaces of boilers, &c."—Dated 2nd January, 1862.

1,947. D. Hottin, of Brussels, for an imported invention of "A chemical compound for rendering tissues incombustible." — Dated 2nd January, 1862.—(French Patent, 30th December, 1861.)

11,948. F. J. Leroy, of Verviers, for "A machine for scouring wool."—Dated 4th January, 1862.

11,949. S. Hayem, sen., represented by A. Crooy, of Brussels, for an imported invention of "A piece of jewellery for tightening and maintaining cravats without a knot."—Dated 3rd January, 1862.—(French Patent, 18th December, 1861.)

11,950. P. J. Jarre, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in all kinds of fire-arms."—Dated 3rd January, 1862.—(French Patent, 18th December, 1861.)

11,951. H. Giffard, represented by A. Crooy, of Brussels, a Patent of Improvement for "An economical steam-engine with a very high pressure."—Dated 3rd January, 1862.—(Original Patent, 21st June, 1861.)

11,952. A. M. P. Airiau, represented by X. Raclot, of Brussels, for an imported invention of "A musical instrument, called 'Organ lute.'"—Dated 3rd January, 1862.—(P. Dupland's French Patent, 10th July, 1860.)

11,953. J. B. Martin, represented by H. Biebuyck, of Brussels, for an imported invention of "Mechanical carts for earthworks on railways, canals, &c."—Dated 3rd January, 1862.—(French Patent, 23rd December, 1862.)

11,954. P. Leprovost, represented by E. J. Hoorickx, of Brussels, a Patent of Improvement for "Railway carriages of rolled iron."—Dated 3rd January, 1862.—(Original Patent, 22nd August, 1861.)

11,955. E. R. Handcock, represented by A. Crooy, of Brussels, for an imported invention of "Obtaining and applying motive-power."—Dated 3rd January, 1862.—(English Patent, 6th July, 1861.)

11,956. Ed. De Ryckere, of Courtrai, for "Improvements in presses and moulds for the manufacture of tiles."—Dated 4th January, 1862.

11,957. F. J. Deneubourg, of Lodelinsart-Charleroi, for "Gates for level railway crossings."—Dated 6th January, 1862.

11,958. G. Brasseur, of Tournai, for an imported invention of "Apparatus for extinguishing fires by steam." — Dated 6th January, 1862. — (Original Patent, 23rd October, 1861.)

11,959. J. J. Gilain, represented by Ed. Gilain, of Tirlemont, for "A machine for extracting stones from quarries."—Dated 4th January, 1862.

11,960. E. G. Sigur, represented by X. Raclot, of Brussels, for "A mode of applying reversed tracings of chromolithographies, &c., on all objects."—Dated 4th January, 1862.

11,961. G. F. Roskopf, represented by Alb. Allard, of Brussels, for "A system of remontoirs on the pendant of hunting watches, &c." — Dated 6th January, 1862.

11,962. Ch. Denis, represented by E. Martin, of Brussels, for an imported invention of "A system of heating by gas."—Dated 6th January, 1862.—(French Patent, 30th August, 1861.)

11,963. L. Rigolier, represented by H. Biebuyck, of Brussels, for a Patent of Improvement for "A system of supports for rails and railway sleepers."—Dated 6th January, 1862. — (Original Patent, 10th May, 1860.)

11,964. A. Pasquier, represented by X. Raclot, of Brussels, for an imported invention of "Improvements in continuous drying apparatus."—Dated 6th January, 1862.—(French Patent, 6th April, 1861.)

11,965. L. J. Jaulin, represented by X. Raclot, of Brussels, for "A musical instrument, called 'Harmoni horn.'"—Dated 6th January, 1862.

11,966. L. J. L. Lazard, represented by X. Raclot, of Brussels, for "Improvements in obtaining photographic proofs."—Dated 6th January, 1862.

11,967. G. De Ridder, of Brussels, for an imported invention of "A system of railway carriages."—Dated 6th January, 1862.—(French Patent, 28th December, 1861.)

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

11,968. F. N. Gisborne, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the construction of electrical targets."—Dated 6th January, 1862.—(English Patent, 16th May, 1861.)

11,969. L. Baird, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the means of preventing incrustations of steam boilers."—Dated 6th January, 1862.—(French Patent, 14th December, 1861.)

11,970. De Fuisseaux, of Baudour-Lens, for "A gas-retort."—Dated 6th January, 1862.

11,971. P. J. Wankenne and L. Debia, of Verviers, for "Mounting cylinders of machines for teaseling stuffs."—Dated 8th January, 1862.

11,972. H. P. Vidal, of Ixelles, for "A filter for smoking tobacco."—Dated 8th January, 1862.

11,973. S. Bentz, represented by H. Biebuyck, of Brussels, for "Improvements in apparatus for cleaning grain."—Dated 8th January, 1862.

11,974. J. Waefelaer, represented by H. Biebuyck, of Brussels, for "A system of taps."—Dated 8th January, 1862.

11,975. N. E. Le Clere, represented by F. Bailleux, of Liége, for "A composition of iron and steel for the manufacture of fine English damask steel."—Dated 6th January, 1862.

11,976. F. Chaumont, of Herstal-Liége, for "A breech-loading gun."—Dated 7th January, 1862.

11,977. L. N. De Meckenheim, of Ixelles, for "A kind of igniting apparatus."—Dated 9th January, 1862.

11,978. A. M. A. Pichery and P. L. Danais, represented by L. De Meckenheim, of Ixelles, for an imported invention of "A mode of stoppering vessels of stoneware, glass, and other substances."—Dated 9th January, 1862.—(French Patent, 12th June, 1861.)

11,979. J. L. Rivret-Justin, represented by L. De Meckenheim, of Ixelles, for an imported invention of "An apparatus for roasting coffee."—Dated 9th January, 1862.—(French Patent, 2nd July, 1861.)

11,980. E. Roux, represented by L. De Meckenheim, of Ixelles, a Patent of Improvement for "An apparatus of railway-carriages with four wheels for preventing railway accidents."—Dated 9th January, 1862.—(French Patent, 2nd July, 1861.)

11,981. J. B. Schalkenbach, represented by A. Crooy, of Brussels, a Patent of Improvement for "A musical instrument, called 'Orchestra-piano.'"—Dated 9th January, 1862.—(Original Patent, 28th October, 1861.)

11,982. A. Rameau, represented by F. Anthoine, of Brussels, for an imported invention of "A machine for coating springs of petticoats, and of other articles."—Dated 9th January, 1862.—(French Patent, 26th February, 1861.)

11,983. A. Callés, of Ixelles, a Patent of Improvement for "A system of motive power."—Dated 10th January, 1862.—(Original Patent, 23rd December, 1861.)

11,984. A. A. Philippe, Son and Compy., represented by O. Daillencourt, of Brussels, for an imported invention of "A rotary press with moveable paddles for extracting beetroot juice."—Dated 10th January, 1862.—(French Patent, 14th August, 1860.)

11,985. L. Farrenc and H. Gloesener, represented by H. Biebuyck, of Brussels, for an imported invention of "A carburator with a burner and wick for lighting gas."—Dated 10th January, 1862.—(French Patent, 6th January, 1862.)

11,986. R. Ormerod, represented by H. Biebuyck, of Brussels, for an imported invention of "A tissue for trimming dresses, mantlets, &c."—Dated 10th January, 1862.—(French Patent, 6th January, 1862.)

11,987. C. R. Neustadt and J. J. J. Bonnefond, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "Apparatus or cranes for distributing water."—Dated 10th January, 1862.—(Original Patent, 26th April, 1859.)

11,988. A. Raymond, of Liége, for "A safety apparatus for broaches, pins, &c."—Dated 11th January, 1862.

11,989. Auguste Lassence, of Liége, for "Applying corrugated iron, galvanized or not, to the construction of railway and other carriages."—Dated 13th January, 1862.

11,990. Auguste Lassence, of Liége, for "An apparatus for corrugating all kinds of iron by the cold process."—Dated 13th January, 1862.

11,991. L. Pasteor, represented by E. Tardif, of Brussels, for an imported invention of "Manufacture of vinegar or acetic acid."—Dated 11th January, 1862.—(French Patent, 9th July, 1861.)

11,992. J. MacIntyre, represented by L. Mesens, of Ixelles, for "Improvements in shells, bombs, and other projectiles."—Dated 11th January, 1862.—(American Patent, 2nd July, 1861.)

11,993. F. N. Gisborne, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in apparatus for measuring the speed of vessels, and in the galvanic batteries for working said apparatus."—Dated 11th January, 1862.—(French Patent, 30th November, 1861.)

11,994. P. Scheurweghs and A. J. A. H. De Boisserolle, represented by W. H. Kirkpatrick, of Ixelles, for an imported invention of "A process for acidifying fat substances used in the manufacture of candles."—Dated 11th January, 1862.—(French Patent, 23rd December, 1861.)

11,995. De Clercq and Co., of Ixelles, a Patent of Improvement for "An apparatus for raising water and for feeding steam boilers."—Dated 11th January, 1862.—(Original Patent, 5th November, 1861.)

11,996. J. B. Melchior, of Ixelles, for "An economical hot-air stove."—Dated 13th January, 1862.

11,997. L. Alond, represented by Mayer and Wolff, of Brussels, for "A process for extracting sulphur and sulphurous acid from the oxisulphuret of calcium."—Dated 13th January, 1862.

11,998. J. P. Schivre, represented by Eug. Guillery, of Brussels, for an imported invention of "Manufacture of cranked axles of locomotives."—Dated 14th January, 1862.—(French Patent, 22nd December, 1855.)

11,999. F. G. Marx, represented by H. Biebuyek, of Brussels, for an imported invention of "Manufaeture of various articles of double skin and other substances in relief."—Dated 14th January, 1862.—(Freneh Patent, 10th January, 1862.)

12,000. E. L. Gras, represented by H. Biebuyek, of Brussels, for an imported invention of "Sehist lamps for earriages."—Dated 14th January, 1862. —(French Patent, 17th Oetober, 1861.)

12,001. Mercier and Company, represented by H. Biebuyek, of Brussels, for an imported invention of "A system of emptying cesspools and sewers." —Dated 14th January, 1862.—(F. Chapusot's Freneh Patent, 10th April, 1857.)

12,002. C. Diellaers, of Ghent, for "A maehine for sizing and dressing warps of flax, oakum, and eotton."—Dated 11th January, 1862.

12,003. Veronique, son, represented by D. De Vos-Verraert, of Brussels, for "A kind of dress for men and women, applicable as a rug for travelling and as a dressing gown."—Dated 15th January, 1862.

12,004. H. Lavignac, of Liége, a Patent of Improvement for "A multiboiler generator applicable to sugar works."—Dated 14th January, 1862.—(Original Patent, 16th Deeember, 1861.)

12,005. C. A. Vincart, of Liége, a Patent of Improvement for "Manufaeture of all kinds of objeets, partly of iron and partly of steel, by eementation." —Dated 16th January, 1862. —(Delrieu and Closon's Patent, 1st August, 1860.)

12,006. M. Bourson, of Liége, for "A manometer of boilers applieable to weighing substanees."—Dated 16th January, 1862.

12,007. A. Hennequin, of Liége, for "A mode of emptying eesspools, sewers, &e."—Dated 16th January, 1862.

12,008. J. Meert and J. Vanden Bossche, of Alost, for "An apparatus applieable to gas burners."—Dated 17th January, 1862.

12,009. Kreps, Son, and Aug. Michiels, of Antwerp, for "Vertieal millstones of sandstone with a eontinuous distribution, charge, and diseharge." —Dated 18th January, 1862.

12,010. R. Telford and J. Sanders, represented by H. Biebuyek, of Brussels, for an imported invention of "Improvements in furniture with eastors." —Dated 17th January, 1862.—(Freneh Patent, 9th January, 1862.)

12,011. J. Bernard, represented by H. Biebuyck, of Brussels, for an imported invention of "An irrigator."—Dated 17th January, 1862.—(Freneh Patent, 14th January, 1862.)

12,012. A. Müller and Company, represented by H. Biebuyek, of Brussels, a Patent of Improvement, for "A mode of treating zine ores."—Dated 17th January, 1862.—(Original Patent, 8th November, 1861.)

12,013. J. B. Bane and A. J. Pasteur, of Brussels, for an imported invention of "A proeess for promoting the melting of substanees used in the manufaeture of window glass."—Dated 17th January, 1862.—(Freneh Patent, 28th Deeember, 1861.)

12,014. Scheurweghs and A. J. A. H. De Boisserole, represented by W. H. Kirkpatrick, of Ixelles, a Patent of Improvement, for "A proeess for aeidifying fat subtanees used in the manufaeture of eandles."—Dated 17th January, 1862.—(Original Patent, 11th January, 1862.)

12,015. Lalmond-Lefort, represented by A. Crooy, of Brussels, for "Safety trunks with invisible keyholes."—Dated 17th January, 1862.

12,016. De Clercq and Company, of Ixelles, a Patent of Improvement, tor "Apparatus for raising water and feeding steam boilers."—Dated 16th January, 1862.—(Original Patent, 5th November, 1861.)

12,017. E. Sacré, of Brussels, for "Improvements in apparatus for feeding steam-boilers."—Dated 16th January, 1862.—(De Clereq and Co.'s Patent, 5th November, 1861.)

12,018. J. B. Grollier and J. L. Porte, represented by T. Steppe, of Brussels, a Patent of Improvement for "An inalterable mastie."—Dated 16th January, 1862.—(Original Patent, 3rd June. 1861.)

12,019. C. J. Demat, represented by J. J. Snoeek, of Brussels, for "An apparatus against fires in general and fire-damp in partieular."—Dated 16th January, 1862.)

12,020. H. Sarrazin, represented by L. De Meekenheim, of Ixelles, for an imported invention of "A motive engine."—Dated 16th January, 1862.—(Freneh Patent, 19th January, 1861.)

12,021. J. Belou, represented by Peyre, of Brussels, or an imported invention of "Improvements in hot-air engines, and in maehines worked both by hot-air and steam."—Dated 16th January, 1862. —(Freneh Patent, 28th Deeember, 1861.)

12,022. F. Herremans, represented by J. N. Herremans, of Brussels, for "An eeonomieal smoke-eonsuming fire-plaee with a vaporizing and feeding eontrivanee."— Dated 18th January, 1862.

12,023. E. J. Hoorickx, of Brussels, for "Manufaeture of relief laee with eoloured designs of portraits, fruit, pietures, &e."—Dated 18th January, 1862.

12,024. P. J. A. Mahieux, represented by H. Biebuyek, of Brussels, a Patent of Improvement for "Manufaeture of hats, military head-eoverings, &e."—Dated 18th January, 1862.—(Original Patent, 6th June, 1861.)

12,025 A. Callés, of Ixelles, a Patent of Improvement for "A system of motive power."—Dated 18th January, 1862.—(Original Patent, 23rd December, 1861.)

12,026. F. V. Guyard, represented by A. Crooy, of Brussels, for "A system of regulating eloeks by eleetricity."—Dated 18th January, 1862.

12,027. Th. Waag, of Mareinelle-Charleroi, for an imported invention of "A railway break."—Dated 21st January, 1862.—(French Publie, 15th Oetober, 1861.)

12,028. R. Ameye, of Ghent, for "A meehanism and arrangement in hot-air pipes used in refining salt."—Dated 18th January, 1862.

12,029. E. J. Hoorickx, of Brussels, for "A kind of laee fringes and mode of arranging the bottoms of lace work."—Dated 20th January, 1862.

12,030. V. Chabre alias L'Eclair, of Brussels, for "A mode of obtaining a great speed applicable to carriages and small boats."—Dated 20th January, 1862.

12,031. H. Montucci, represented by H. Biebuyck, of Brussels, for an imported invention of "A mode of goffering high relief stuffs by means of moveable pieces and a soft siccative paste."— Dated 20th January, 1862.—(French Patent, 18th September, 1861.)

12,032. J. B. Guissez, represented by H. Biebuyck, of Brussels, for an imported invention of "A self-unloading dredging boat."—Dated 20th January, 1862.—(French Patent, 17th January, 1862.

12,033. R. Brooman, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in breech-loading fire-arms."—Dated 20th January, 1862.—(French Patent, 19th November, 1861.)

12,034. J. B. F. Magnan, represented by H. Biebuyck, of Brussels, for an imported invention of "A machine for the manufacture of horse-shoes."—Dated 20th January, 1862.—(Defossez's French Patent, 2nd November, 1861.)

12,035. M. Tassin and P. C. H. Chabrol, represented by H. Biebuyck, of Brussels, for an imported invention of "A clack-valve slop pail."—Dated 20th January, 1862.—(French Patent, 26th September, 1861.)

12,036. C. J. P. Desnos-Gardissal, represented by O. Daillencourt, of Brussels, for an imported invention of "An electrical apparatus for the safety of railway trains."—Dated 20th January, 1862.—(French Patent, 7th October, 1861.)

12,037. Boch, represented by O. Daillencourt, of Brussels, for an imported invention of "Manufacture of coloured flagstones."—Dated 20th January, 1862.—(French Patent, 7th August, 1861.)

12,038. A. Gendebien, of Montigny-sur-Sambre-Charleroi, for "Applying rolled iron to the fastening of doors, windows, show-windows, &c., and manufacture of said iron."—Dated 23rd January, 1862.

12,039. Gendebien, of Montigny-sur-Sambre-Charleroi, for "Manufacturing and applying puddled steel and rolled iron to the construction of doors, windows, shutters, Venetian blinds, &c."—Dated 23rd January, 1862.

12,040. A. Gendebien, of Montigny-sur-Sambre-Charleroi, for "A mode of using vertical tubes or hollow columns in blast furnaces for the purpose of promoting their working, of introducing substances possessing a chemical action, and of burning close-burning coal."— Dated 23rd January, 1862.

12,041. H. Distexhe, of Liége, for "A corkscrew."—Dated 22nd January, 1862.



FRANCE.

Current List of Patents of Invention and Certificates of Addition.

1861.

(Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.)

Note.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

50,980. Amenc, of Clermont-Ferrand, for "A self-acting lubricating cup."—Dated 5th September, 1861.

50,981. Aubugeau, with Armengaud, of 23, Boulevart de Strasbourg, Paris, for "A mode of propelling vessels."—Dated 29th August, 1861.

50,982. Brocot, of 6, Rue du Parc Royal, Paris, for "Mechanical arrangements applicable to clocks and watches."—Dated 28th August, 1861.

50,983. Brodin, of Soissons, for "Improvements in moderator lamps."—Dated 10th September, 1861.

50,984. Brulls, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A kind of force and lift pump with a single and double action."—Dated 29th August, 1861.

50,985. Camu, of 18, Rue Basfroi, Paris, for "A kind of lock."—Dated 29th August, 1861.

50,986. Crochez, of St. Pierre les Calais, for "A mechanical application of the parallel lift for thrashing machines." — Dated 9th September, 1861.

50,987. Fonnar, represented by Albert-Lemaire, of 22, Rue de la Clef, Lille, for "A machine for drying and cleaning malt and other grain and seeds."—Dated 12th September, 1861.

50,988. Gillard, with Henrichs, of 15, Rue de la Victoire, Paris, for "A petticoat with a spiral tube and compressed air."—Dated 29th August, 1861.

50,989. Greczynski, represented by Brade, of 29, Rue Ste. Anne, Paris, for "A kind of refreshing sugar plums."—Dated 26th August, 1861.

50,990. Grufeille, of Montgaillard, for "A process for preventing iodine, called 'Regenerator of vines.'"—Dated 7th September, 1861.

50,991. Huteau, of 17, Fossés de l'Industrie, Bordeaux, for "A travelling press for marking crests and initial letters in relief colour."—Dated 7th September, 1861.

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* For the French Patent Law see No. 228 of this Journal.

50,992. JANNETTAZ, of 137, Grand Rue Villejuif, for "Manufacture of bricks." — Dated 29th August, 1861.

50,993. JUHEL-DESMARES, represented by Bos-Darnis, of 36, Rue de l'Echiquier, Paris, for "A kind of stuffs."—Dated 28th August, 1861.

50,994. KAY, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machines for spinning and twisting thread."—Dated 28th August, 1861.—(English Patent, 4th March, 1861.)

50,995. LENK, of 121, Rue du Cherche Midi, Paris, for "A kind of penholder."—Dated 28th August, 1861.

50,996. MARAVAL, of Réalmont, for "Improvements in the manufacture of supple felt hats of one single round piece for obtaining thereby all kinds of designs and variegated colours."—Dated 10th September, 1861.

50,997. MARTIN, represented by Castelbon, of 15, Rue des Petites Ecuries, Paris, for "A mechanical packing apparatus."—Dated 28th August, 1861.

50,998. MARTINON, of 58, Rue Notre Dame, Bordeaux, for "A fountain penholder."—Dated 10th September, 1861.

50,999. NICOLLEAU, of 18, Rue Boileau, Nantes, for "An instrument of gymnastics, called 'Alternate and circular swing.'"—Dated 10th September, 1861.

51,000. OUDIN and CHARPENTIER, of 74, Rue du Vert Bois, Paris, for "An illustrated journal holder."—Dated 26th August, 1861.

51,001. PASQUIER, of 18, Rue de Chartres, Lyon, for "A kind of paper passe-partout."—Dated 3rd September, 1861.

51,002. PAULIS, represented by Besaucèle, of 55, Rue de Vaugirard, Paris, for "Manufacture of steel."—Dated 29th August, 1861.

51,003. RENAUX, of 32, Rue Martainville, Rouen, for "An apparatus for reheating the feed water in steam generators."—Dated 9th September, 1861.

51,004. ROSE and CROWDER, represented by Basset, of 14, Boulevard Montmartre, Paris, for "Improvements in apparatus for raising and supporting vessels and ships,"—Dated 28th August, 1861.—(English Patent, 28th February, 1861.)

51,005. SAINTESPÈS, of Langon, for "A hand machine or apparatus with a friction for husking grain and seeds."—Dated 11th September, 1861.

51,006. SAUSSINE, of 14, Rue Vielle Notre Dame, Paris, for "A kind of arm chairs."—Dated 29th August, 1861.

51,007. SEGNAVE, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kind of gas filter."—Dated 27th August, 1861.

51,008. TELESIO, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in rotary machines for the manufacture of cork stoppers."—Dated 28th August, 1861.

51,009. VARENNES, of Revel, for "A trochosteme or stop for wheels."—Dated 6th September, 1861.

51,010. VERZIER and Company, of 22, Rue Pizay, Lyon, for "A tissue of silk or any other substance, called 'Protcus taffeta.'"—Dated 5th September, 1861.

51,011. ANDROUET, of 3, Impasse Constantine, Paris, for "A night lamp capsule."—Dated 29th August, 1861.

51,012. BORIE, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A portemonnaie and means of manufacturing the same."—Dated 30th August, 1861.

51,013. BOTTURI, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in looms applicable to the manufacture of objects in pieces, &c., figured or otherwise, and in tissues." — Dated 2nd September, 1861.— (English Patent, 2nd March, 1861.)

51,014. CANIER, of 27, Rue de Tourville, Paris, for "A wet stamp worked by percussion or pressure with a revolving pad and alternate movement."—Dated 31st August, 1861.

51,015. COGNIET, of 88, Rue de Clichy, Paris, for "Applying the volatile oil of petroleum to purifying and bleaching paraffine."—Dated 2nd September, 1861.

51,016. CROC, of Aubusson, for "Manufacture of indelible ink of aniline."—Dated 17th September, 1861.

51,017. CUVILLIER, of 18, Rue Bénard, Paris, for "A micro-photographic apparatus."—Dated 2nd September, 1861.

51,018. DARNET, of 26, Boulevart des Italiens, Paris, for "A counter for carriages."—Dated 3rd September, 1861.

51,019. DEHORS, of 8, Rue des Vieilles-Haudriettes, Paris, for "A toy."—Dated 31st August, 1861.

51,020. FORTIN, of Chapareillan, for "A harvester with a spreading apparatus."—Dated 7th September, 1861.

51,021. GILLES, domiciled with Bernardelle, of 22, Rue Coquillière, Paris, for "Manufacture of so-called 'Orpheonian fans.'"—Dated 2nd September, 1861.

51,022. GOFFIN, domiciled at the Hotel du Louvre, Rue de Rivoli, Paris, for "Pipes with collars."—Dated 30th August, 1861.

51,023. GRAMME, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in regulators of electrical light."—Dated 31st August, 1861.

51,024. GRANGEON, with Isopy, of 45, Rue de Sèvres, Paris, for "Paper with advertisements for closets."—Dated 31st August, 1861.

51,025. GRASSIN-BALEDANS, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Various applications of thinned worked iron." — Dated 31st August, 1861.

51,026. HAINGUERLOT, represented by Bouquié, of 43, Rue St. Georges, Paris, for "Preserving spirituous and alcoholic liquids, and means of preventing evaporation in decanting and cellaring the same."—Dated 30th August, 1861.

51,027, JAMES, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machines for working wood, &c."—Dated 31st August, 1861.

51,028. LANDOIS and LAMY, Father, of 64 and 66 Rue d'Elbeuf, Rouen, for "An oil-lubricating apparatus."—Dated 13th September, 1861.

51,029. Leprince, represented by De Lavallée, of 5, Rue du Bouloi, Paris, for "A kind of apparatus for burning gas."—Dated 31st August, 1861.

51,030. Louvat-Canada, of Vizille, for "A thrashing machine with oscillating levers."—Dated 10th September, 1861.

51,031. Maillefert, of 56, Rue Beaubourg, Paris, for "Improvements in the construction of scales."—Dated 31st August, 1861.

51,032. Martin, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Manufacture of cast-iron, steel, and iron, by continuous smelting, and without bringing the ore into contact with the fuel."—Dated 29th August, 1861.

51,033. Melrose, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in the construction of wheels of railway carriages."—Dated 2nd September, 1861.—(English Patent, 29th July, 1861.)

51,034. Mielle, domiciled with Monvoisin, of 27, Rue de Paradis-Poissonnière, Paris, for "Using cement."—Dated 31st August, 1861.

51,035. Mosselman and Comp., of 15, Rue de Milan, Paris, for "Manufacture of manure."—Dated 4th September, 1861.

51,036. Pitoy-Millot, of Faubourg St. Pierre, Nancy, for "Using the stalk of potatoes in the manufacture of paper."—Dated 13th September, 1861.

51,037. Thiéry, of 74, Rue Notre Dame de Nazareth, Paris, for "Manufacture of colour crayons called 'Fixed pastel.'"—Dated 30th August, 1861.

51,038. Vardon, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Artificial antidamp and inacoustic bricks and stones."—Dated 31st August, 1861.

51,039. Vincent, of 32, Rue St. Loup, Troyes, for "A kind of paper."—Dated 11th September, 1861.

51,040. Walck, of 47, Rue Montmartre, Paris, for "A kind of travelling bag with a double fan."—Dated 29th August, 1861.

51,041. Arnaud, represented by Castelbon, of 15, Passage des Petites-Ecuries, Paris, for "A machine for beating omelettes, eggs, cream, biscuit paste."—Dated 5th September, 1861.

51,042. Audouy, of 29, Rue St. Georges, Paris, for "A life apparatus for vessels."—Dated 4th September, 1861.

51,043. Berthot, of 49, Rue des Bons-Enfants, Paris, for "A brick machine."—Dated 5th September, 1861.

51,044. Beyer and Franck, of St. Dié, for "Extracting fecula from tubercles, seeds, and plants by means of millstones."—Dated 14th September, 1861.

51,045. Bonvalet and Donchery, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the manufacture of fastenings of cases for opera-glasses, &c."—Dated 4th September, 1861.

51,046. Camproger and Lemaitre, of Place du Change, Nantes, for "A kind of tinted embroidery."—Dated 8th August, 1861.

51,047. Chauve senr., represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in fastening dresses."—Dated 5th September, 1861.

51,048. Cochet, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the construction of locomotive engines and their boilers."—Dated 5th September, 1861.

51,049. Cook, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Means of preserving the silvered surfaces of looking-glasses."—Dated 6th September, 1861.—(English Patent, 22nd February, 1861.)

51,050. David, of 20, Rue St. Fiacre, Paris, for "A machine, called 'Dynamometer for thread.'"—Dated 4th September, 1861.

51,051. David, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in air-motors."—Dated 5th September, 1861.

51,052. Dubois, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Mounting wigs and false tufts."—Dated 6th September, 1861.

51,053. Gannal, of 6, Rue de Seine, Paris, for "A mode of embalming corpses."—Dated 4th September, 1861.

51,054. Gatel, of 179, Avenue de Neuilly, Neuilly, for "A photographic microscope."—Dated 6th September, 1861.

51,055, Hug, of 13, Rue Méséah, Paris, for "An apparatus for lubricating machinery."—Dated 5th September, 1861.

51,056. Langen, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "An apparatus for collecting the waste gas of blast furnaces."—Dated 6th September, 1861.

51,057. Laporte, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "Improvements in the construction of lace-frames."—Dated 5th September, 1861.

51,058. Lauth, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Machines for glazing sheet-iron."—Dated 6th September, 1861.

51,059. Maillot, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "A moveable calendar, and its arrangements and means of applying the same to all kinds of moveable calendars."—Dated 5th September, 1861.

51,060. Malavergne, of Baigneaux, for "A mode of sweeping chimneys."—Dated 14th September, 1861

51,061. Masson, of Nancy, for "Iron wheels for all kinds of carriages."—Dated 14th September, 1861.

51,062. Mead, represented by Combres, of 28, Rue du Garde, Paris, for "Improvements in bidons."—Dated 4th September, 1861.—(English Patent, 2nd May, 1861.)

51,063. Poitrineau, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A portable and ambulant apparatus for keeping photographic tools and parts belonging thereto."—Dated 4th September, 1861.

51,064. Retigan, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A compound used as food for cattle."—Dated 6th September, 1861.

51,065. RICANNET, of 20, Rue Bugeaud, Lyon, for "A machine for finishing presspoint."—Dated 11th September, 1861.

51,066. RIOUX, of 36, Rue de Bourbon, Lyon, for "Hydrofere and calorifere vapour baths."—Dated 11th September, 1861.

51,067. ROMAN, represented by Amouroux, of 333, Rue St. Martin, Paris, for "A steam boiler."—Dated 5th September, 1861.

51,068. SACLEUX, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A cover for pamphlets and holder of newspapers."—Dated 4th September, 1861.

51,069. SAVARIAUX, of 18, Rue Lenoir, Paris, for "A kind of wrench."—Dated 7th September, 1861.

51,070. TOUILLON, of 14, Rue de la Banque, Paris, for "A kind of collars and ruffles."—Dated 4th September, 1861.

51,071. VALIN and MICHAU, of 11, Rue de Roanne St. Etienne, for "An apparatus for distilling liquid or solid substances, and for simultaneously rectifying the products of distillation."—Dated 14th September, 1861.

51,072. WALCKER, of 3, Rue Turgot, Paris, for "A hammock bed."—Dated 5th September, 1861.

51,073. AUBERT, of La Villatte, for "A plough."—Dated 18th September, 1861.

51,074, BEAUNAUT, of 6, Rue du Paradis, Bourges, for "Moveable book-binding." — Dated 18th September, 1861.

51,075. BOUCHER and REYNARD, of 2, Rue Désirée, Tarare, for "A spool for embroidering cotton and silk."—Dated 14th September, 1861.

51,076. D'AGON DE LACONTRIE, of Alger, for "Improvements in cotton gins."—Dated 27th August, 1861.

51,077. DUCHAMP, of 4, Place Sathonay, Lyon, for "A machine for the manufacture of chenille."——Dated 18th September, 1861.

51,078. DURAND and CROZET, of 11, Rue de la Bourse, St. Etienne, for "Satin made by means of velvet in double pieces."—Dated 17th September, 1861.

51,079. FAVEREAU, of 6, Rue du Pont de Lodi, Paris, for "Arrangements in millstones."—Dated 7th September, 1861.

51,080. FINQUENEISEL, of Racrange, for "Manufacture of seamless knapsacks, wallets, straw mattresses, and trousers."—Dated 16th September, 1861.

51,081. FISCHER and Comp., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A product for straps, pipes, &c."—Dated 7th September, 1861.

51,082. FONTAINE, of 82, Rue Curiol, Marseille, for "A process of reproduction and engraving on metal, called 'Chalcopantography.'"—Dated 16th September, 1861.

51,083. FUSNOT, domiciled with Parmentier, of 1, Rue d'Hauteville, Paris, for "Manufacture of bottoms for sockets or entire sockets applicable to breech-loading fire-arms."—Dated 7th September, 1861.



THE NETHERLANDS.

(*Communicated by His Excellency the Minister of the Interior.*)

LIST of PATENTS Delivered and Prolonged since the 6th November, 1861.*

(For previous List, see No. 822 of this Journal.)

1. PATENTS DELIVERED.

1. P. A. LE COMTE DE FONTAINE MOREAU, of Paris, represented by L. J. Vonk, of Gravenhage, for an imported invention of "Manufacture of glass casks or vessels."—5 years.—Dated 8th February, 1860.

2. J. J. LENOIR, of Paris, represented by J. C. De Roode, of Gravenhage, for an imported invention of "Improvements in machines worked by hot air obtained from the combustion of gases."—10 years.—Dated 21st February, 1861.

3. H. SLINSBY BETHEL, of London, represented by Vriesendorp and Gaade, of Gravenhage, for an imported invention of "Improvements in grease for lubricating machinery and railway and other carriages."—10 years.—Dated 1st November, 1861.

4. V. WERY, of Luik, domiciled with Pirongs, of Maastricht, for an imported invention of "A new kind of arm-chairs applicable to railway-carriages."—5 years.—Dated 6th December, 1861.

5. J. J. VAN DEN BERG, of Gravenhage, for an imported invention of "Fire-wood obtained from the residue of cork."—10 years.—Dated 2nd January, 1862.

1. PATENT PROLONGED.

1. VAN DER WIEL Brothers, of Amsterdam, (G. Cramer and Sons, of Amsterdam, assignees,) for an imported invention of "A new compound for coating walls, floors, or vaults for protecting them from dampness."—5 years.—Dated 17th September, 1861.—(Original Patent, 17th September, 1856.)

* For the Dutch Patent Law, see No. 289 of this Journal.



UNITED STATES OF AMERICA.

(Communicated by the Commissioner of Patents.)

List of Patents, with claims annexed, issued from the United States Patent Office, for the week ending 14th January, 1862, and each bearing that date.

No. 34,124. John Baldwin, jr., of Berea, Ohio, for an "Improvement in machines for making grindstones."

"I claim the enclosure G, fan L, chamber M, and discharge pipe N, when these parts are arranged as described, and used in combination with a machine for forming grindstones, and operating as and for the purpose herein set forth."

No. 34,125. Alfred Bliss, of New York, N.Y., for an "Improvement in lamps."

"I claim the annular clamp D, formed of two parts *b*, *b*, connected together at one end by a hinge or joint C, in combination with the loops or lips *f*, *f*, on the lamp top A, substantially as and for the purpose herein set forth."

No. 34,126. Freeman Brady, jr., and John C. Noble, of Washington, Pa., for an "Improvement in magazine gun."

"We claim the combination of the aperture of *f*, catch G, and spring H, employed as set forth, to secure the magazine, and permit its ready insertion and removal laterally of the stock."

No. 34,127. Wm. O. Bridges, of Philadelphia, Pa., for an "Improvement in optical telegraphs."

"I claim the tube B, with its lens, and one or more adjustable mirrors, arranged substantially as described, in combination with the device herein described, or any equivalent to the same, for obscuring or exposing the lens or moving differently-colored plates of glass to the front of and away from the lens, as set forth for the purpose specified."

No. 34,128. Moses Chandler, of East Corinth, Maine, for an "Improvement in horse hoes."

"I claim, 1st, attaching the wings H, H, of the implement to the beam A, by means of the rods I, J, which are fitted in eyes *g*, at the ends of bolts K in the beam, in combination with the joints *h* which connect the front ends of the parts *d* of the wings to the rods I, and the slots *i*, in the lower parts of the rods J, through which the bolts *f* at the back ends of the parts *d* pass, whereby the wings may be adjusted as and for the purposes set forth. 2nd, forming the wings H, H, of two parts *d*, *e*, connected together by a pivot or bolt *f*, for the purpose specified. 3rd, the adjustable and yielding cultivator blades F, when arranged as shown and used in connection with the wings H, for the purpose set forth. 4th, in combination with the wings H, attached to the beam A as shown, the stay rods L, and adjustable bolt M, arranged as shown to ensure the proper bracing of the wings H, at all points of their adjustment, as described."

No. 34,129. Edwin Clark, of Lancaster, Pa., for an "Improvement in flouring and grist mills."

"I claim, first, the conic cylinder J, with its central distributing disk Y, connecting arms Z, and lugs R, R, beneath it, when employed in combination with the balance rine, substantially as set forth. Secondly, I also claim the distributing disk Y (Fig. 3), with its lugs R, without the conic cylinder, when employed in combination with the balance rine aforesaid. Thirdly, I also claim the adjustable tube Q, with its vibrating section O, and set screw P, in combination with the distributing disk Y, substantially as specified."

No. 34,130. Edwin Clark, of Lancaster, Pa., for an "Improvement in alarm indicator for grist and flouring mills."

"I claim combining with the buhr spindle of a mill, or with any other moving part of the mill gearing, a governor and an alarm apparatus, by which any variation from the proper or previously regulated velocity of the buhr or buhrs for good grinding will be brought to the notice of the attendant, substantially as described. I also claim, in combination with the buhr spindle or other moving part of the mill gearing and a governor, a rod, hand, or indicator that will show to the attendant when the speed of the buhr or buhrs is at its regulated or desired velocity, or any variation therefrom, whether greater or less, substantially as described."

No. 34,131. William Frazer Cochrane, of Springfield, O., for an "Improvement in grain threshers and separators."

"I claim, first, locating the driving gearing upon the base of the machine, substantially in the manner described, for the purposes set forth. Second, enclosing the driving gearing in a solid stand or frame independent of the main frame, substantially as described. Third, the combination of the diagonal braces *a*, with the combined stand B, substantially as herein described, for the purpose specified. Fourth, pivoting the combined stand to the main frame, substantially in the manner and for the purpose described. Fifth, the combination of the combined stand B, lever C, and lifting screw *c*, substantially in the manner described, for the purpose set forth. Sixth, driving the threshing cylinder directly from both ends of the counter shaft, and independently of the separate mechanism, as described. Seventh, driving the threshing and separating mechanisms independently of each other, by means of pulleys on each end of the counter shaft, cylinder shaft, and beater shaft, as described, for the purposes specified."

No. 34,132. William Frazer Cochrane, of Springfield, Ohio, for an "Improvement in grain threshers and separators."

"I claim, first, mounting the threshing and separating mechanisms in an independent adjustable frame, capable of moving freely in a vertical plane within the main frame, for the purposes set forth. Second, the combination of the driving and gearing and threshing cylinder, substantially in the manner described. Third, the combination of the driving, gearing, and separating mechanism, substantially in the manner described."

No. 34,133. William Frazer Cochrane, of Springfield, Ohio, for an "Improvement in grain threshers and separators."

"I claim, first, a creeping cloth, arranged transversely across the machine to convey the winnowed grain directly from the vibrating shoe to the bagger. Second, the combination of a vibrating shoe, a creeping cloth, and a fan shaft, substantially in the manner described. Third, the combination of a creeping cloth, a fan shaft, and a vibrating shoe, with an adjustable or independent frame, substantially as described."

No. 34,134. J. H. Dennis, of Louisville, Ky., for an "Improvement in running gear of railroad cars."

"I claim, 1st, the combination with a divided axle C, C^1, or two axles working in line of a compound journal box E, constructed and adapted substantially as herein shown and explained, to afford both bearings and connection to the adjacent ends of said axles. 2d, the combination of the wick H, tube I, and clamping screw L, employed substantially in the manner explained, to supply the journals automatically with oil and control the flow thereof, as may be required."

No. 34,135. J. H. Dennis, of Louisville, Ky., for an "Improvement in railroad turntables."

"I claim any device, substantially as herein-before explained, whereby the table, while permitted to turn freely in one or the other direction, is automatically arrested the instant the rails are in position to enable the car to return on the track by which it approached."

No. 34,136. J. H. Dennis, of Louisville, Ky., for an "Improvement in omnibus springs."

"I claim connecting the bed C to the longitudinal bars or springs B, B, by means of a transverse bar F, springs E, E^1, and hangers D, substantially as and for the purposes explained."

No. 34,137. Joseph Edgecomb, of Worcester, Mass., for an "Improvement in boring machines."

"I claim, first, constructing frame F, in curved form, and so as to extend around the flanges *d*, *d*, of frame D, to reduce friction, and afford sufficient space for the free operation of the rack and gearing, substantially as described. Second, the combination of the curved hinged rack piece M, and gear L, with frames D and F, substantially as and for the purposes set forth. Third, the combination with the top of frame D, and rack piece M, of the cap piece N, and its slotted tubular projection *m*, and its spring *n*, as and for the purposes set forth. Fourth, the combination of the adjusting rod O, with rack piece M, frame F, and the parts connected therewith, substantially as and for the purposes set forth."

No. 34,138. James Fitton, of Cavendish, Vermont, for an "Improvement in carding engines."

"I claim, the arrangement and combination of the apron with the mechanism preceding the main card cylinder, in such a manner that the apron shall extend under the said mechanism for the purpose herein described."

No. 34,139. W. W. Flemiken, of Colony, Iowa, for an "Improved water wheel."

"I claim having the buckets *c* of the wheel F connected at their outer ends and lower part so as to form a continuous rim all around the wheel, while the upper ends of the buckets are detached, when said wheel thus constructed is used in combination with a stationary deflecting plate E placed at the top of the wheel, and secured to the scroll; all being arranged as and for the purpose set forth."

No, 34,140. Henry B. Goodyear, of New Haven, Conn., for an "Improvement in gaiters."

"I claim, as a new article of manufacture, a gaiter wholly or in part elastic, made of vulcanized india rubber, or of its elastic compound, or its equivalent, and backed by a knit web, or other textile tensible fabric, the upper surface being varnished, and the whole constructed substantially in the manner as herein set forth."

No. 34,141. Wm. Graichen and C. Hoffman, of Clinton, Mass., for an "Improvement in power looms."

"I claim, 1st, the grids A, A^1, constructed with projections *a*, *a*, in front of the lower parts of their dents *b*, *b*, applied in guides formed in or upon or attached to the lay, and having a rising and falling motion substantially as and for the purpose herein described. 2nd, operating the so-constructed grids by means of a rock shaft B, arms *e*, *e*, *g*, a spring *f*, and a fixed stud *h*, the whole applied, arranged, and combined substantially as herein specified. 3rd, the feeling fork lever E, working on a fixed fulcrum, and combined with the horizontally moving lever H, which acts on the belt shipper by means of a bent lever G, attached to the said lever H, and connected with E, substantially as herein specified. 4th. The positive stop-motion, composed of the stop piece *v* on the lever H, the rod T, the spring Y, the lever S, and stop wheel Q, and spring Z, the whole arranged, combined, and operating substantially as and for the purpose herein specified."

No. 34,142. John J. Haley, of South Dedham, Mass., for "Improved rollers for wringing machines."

"I claim my improved roller made substantially as described."

No. 35,143. E. C. Hamlin, of Pavilion, N. Y., for an "Improvement in car coupling."

"I claim the employment in self-couplers for cars of a link with a circular head and slot, as described, in combination with the adjusting C and follower F. Also the combination and arrangement of the adjustable clamping yoke *y* and pin *p*, with the lever R, and pawl *r*, as and for the purposes specified."

No. 34,144. Adam Hawver and W. H. Hanyen, of Galva, Illinois, for an "Improved churn and butter worker."

"I claim the dasher D, staff E, concave C, inclined bottom B, partition *c*, *d*, circular flange *e*, and section *g*, when combined, arranged, and operating in the manner and for the purpose set forth."

No. 34,145. Josiah Hayden, of Columbus, Ohio, for an "Improvement in water elevators."

"I claim the special arrangement of the shifting gears N, P., in combination with the windlass wheel K, flat chain L, bucket E, pin G, and bail C, when these parts are arranged and operated in the manner and for the purpose herein set forth."

No. 34,146. James Jenkins, of Elizabeth, N. J., and George H. Cook, of New Brunswick, N. J., for an "Improved method of working silicious and other calamine ores of zinc."

"We claim the use of oxide of iron, iron ore, lime or lime-stone, or other basic substance, either separately or mixed, as a flux or fluxes for separating the silica and other earthy impurities from the zinc contained in the silicious and other calamine ores of this metal in the manner substantially as set forth, these ores being first prepared for working in the common way."

No. 34,147. Henry Isham, of New Britain, Connecticut, for an "Improvement in water meters."

"I claim combining two or more water meters substantially as herein described by means of a compound valve or the equivalent thereof, substantially as described, and operated by the force of the passing water as set forth."

No. 34,148. Robert A. Hove, of Washington, D.C., for an "Improvement in tobacco pipes."

"I claim making the body of a pipe of three main divisions, to wit, a removable tobacco chamber having a perforated metallic base and metal sides, a smoke-circulating chamber and a saliva reservoir opening from below, the whole being constructed, arranged, and combined substantially in the manner and for the purpose described. I also claim the main division A, in combination with the main division B, the two divisions being united in the manner and for the purpose described."

No. 34,149. Charles Leavitt, of Cleveland, Ohio, for an "Improvement in carriage wheels."

"I claim so dividing the two parts of the hub F and G into alternate depressions and projections, having their longitudinal faces bounded by radial lines from the center of the axle, and filling the alternate spaces a^1 and *e* with spokes, in such a manner that each spoke shall have in part a metallic bearing upon each side, filling the entire space with spokes as described, in combination with the concave face of F and the convex face of G, the nut H and cap K operating as and for the purpose set forth."

No. 34,150. James Leffel, of Springfield, Ohio, for an "Improved water-wheel."

"I claim, first, the combination of the parts B, C, and D, with the buckets *a* and *b*, arranged in relation to each other as and for the purposes set forth. Second, the combination and arrangement of the parts mentioned in the above claim with the valves or gates H, and the wheel casing E composed of the parts F, G, and E^1, substantially as described. Third, the combination of the wheel A as seen in Figs. 2, 3, 4, and 5, with its casing valves, and the means for operating the same as seen in Fig. 1 and 2, when said parts are constructed and arranged to operate in relation to each other as set forth."

No. 34,151. Richard F. Loper, of Philadelphia, Pa., for an "Improved means for covering and repairing iron ships and other navigable vessels."

"I claim the planking of old iron boats or second-hand vessels, as set forth, whereby a safe and good vessel or boat can be made out of any iron vessel or boat after the iron has become thin by wear or rust, as described."

No. 34,152. James W. Macintire, of Woburn, Mass., for an "Improvement in stalls for horses."

"I claim my improved stall as constructed, with the opening B, the door C, and the rack F applied and made to operate together, substantially in the manner set forth. I also claim the V-shaped rack arranged and made to operate in the manner set forth."

No. 34,153. Benj. A. Mason, of Newport, R.I., for an "Improvement in casting projectiles for fire-arms."

"I claim the reciprocating dies and plunger substantially as described, in combination with the hopper provided with the spring stops or equivalent means for holding up the slug of lead until it is acted upon by the plunger, as set forth."

No. 34,154. Robert McCain, of Rootstown, Ohio, for an "Improvement in feed cutters."

"I claim the detachable box Y in combination with the feed and cutting apparatus, arranged and operating as and for the purpose set forth."

No. 34,155. Thomas McDonough, of Middletown, Conn., for an "Improved hot-air engine."

"I claim, first, a plunger containing a piston and a chamber, and moving through a fixed packing ring, substantially as described. Second, the bowl D upon the end of the plunger, substantially as described. Third, the connection of the piston and fly-wheels by side rods in combination with the open plunger, substantially as described."

No. 34,156. Marvin Mead, of Bedford, Michigan, for an "Improvement in tire upsetting machines."

"I claim the employment of the concave adjustable clamps F, F, when arranged and used with the arms B, B, the levers (D), (E), the connecting rods *c*, *c*, and rest G, the clamps being connected to the levers (D) by means of a ball joint, and their ends being formed, so as to lap or joint on the outside of the tire, as and for the purpose specified."

No. 34,157. Martin Metcalf, of Grand Rapids, Michigan, for an "Improvement in comb frames for beehives."

"I claim constructing the top bar A and side bars B of adjustable frames for bee hives, with the bevelled ends *a*, *b*, in the manner described, when used in connection with a movable front and in a rectangular box or hive."

No. 34,158. Freedom Monroe, of Romeo, Michigan, for an "Improvement in machines for filling wagon ruts on highways."

"I claim the framework which stands upon the ground, the posts each side, the bench and wheels on top the post and lever, the pulley and cord, the platform, the driver's seat, and the post passing up through the same, the hooks, bands, and straps round the axletree in combination."

No. 34,159. William Morehouse, of Buffalo, N.Y., for an "Improvement in spoke tenon augers."

"I claim broadly a centre sliding plug, which performs the double function of centring and gauging the varying sizes of tenons. 2d, a graduated centre sliding plug, in combination with a tubular sleeve, a compressible spring, and a surrounding tubular socket. 3d, a tubular sleeve, carrying a centring pin, in combination with a compressible spring, a steady pin, and a surrounding socket, substantially as described. 4th, I claim knife blocks and guide blocks, having slotted inner ends as described, in combination with a graduated centre sliding plug and tubular sleeve, as described. 5th, I claim making the shank C and steady pin *f* in one piece, and confined to the socket A by an intermediate screw body, which forms shoulders for one end of the socket and one end of the spring to abut against."

No. 34,160. Charles Monson, of New Haven, Conn., for an "Improved extension table."

"I claim the improved extension table as constructed with two leaves A, B, combined with the stand C by means and so as to operate substantially as specified. And in combination with the leaves and stand, when made and applied together as described, I claim the finishing bars or strips F, F, to be arranged in manner and for the purpose substantially as set forth."

No. 34,161. Francis Murgatroyd, of Cleveland, Ohio, for an "Improvement in oscillating steam engines."

"I claim, 1st, the combination of the openings *s*, *s*, and *e*, *c*, so as to open two ports to steam, and two to exhaust at the same time. 2nd, I claim the valve figure 7, in combination with the reversing lever O^{11}, by means of which the engine can be reversed at pleasure, as specified."

No. 34,162. Charles Neer, of Albany, N.Y., for an "Improvement in metallic blinds for windows, &c."

"I claim, first, the strips *c* bent or folded as shown, and applied to the iron blind frame, composed of the vertical stiles *a*, *a*, united to each other by the cross bars or rails *b*, *b*, the parts receiving the tenons of the blind slats, as set forth. Second, I claim the metallic slats *e*, *e*, attached at their lower corners, and provided with the disk 5 and spring 6, for the purposes and as set forth. Third, I claim the bars *h* hinged to the blind frame, as set forth so that they can be turned against the slats to keep them shut, as specified."

No. 34,163. A. M. Peniston, of Wellington, Missouri, for an "Improvement in seeding machines."

"I claim the arrangement and combination with a seed planter, substantially such as herein described, of the rock shaft (*o*, *p*, *p*), plug or ball valves (*q*, *q*), lever (*r*), with a curved slot (*u*), and the sliding clutch (*v*), as and for the purpose herein set forth."

No. 34,164. Wm. S. Sampson, of New York, N.Y., for an "Improvement in grain bins."

"I claim forming the bins of a granary for storing grain in bulk of alternate cylindrical chambers, and chambers formed partly of flat walls, and partly of portions of each of the contiguous cylinders, substantially in the manner and for the purpose as set forth."

No. 34,165. John B. Sardy, of New York, N.Y., for an "Improved construction of ships of war and other navigable vessels."

"I claim the combination of two or more stern posts *a*, *a*, two or more keels *d*, *d*, and two or more propellers *h*, *h*, or other motors, revolving in the same vertical plane, constructed and operating in the manner and for the purpose described, in order that greater buoyancy, speed, and capacity may be obtained. I claim also the combination of the central keel *e* with keels *d*, *d*, and propellers *h*, *h*, and inclined runs *b*, *b*, substantially as herein specified. I also claim the pointed prow tapered in all directions, when used in a hull, as before described."

No. 34,166. John Schaffer and Edwd. Spencer, of St. Louis, Missouri, for a "Hand printing press."

"I claim making a hand stamping press, substantially in the manner described, so as to stamp and perforate the ticket, ink the form, and supply the ink to the inking roller in a single operation, substantially in the manner set forth."

No. 34,167. J. A. Schneider, of Cleveland, Ohio, for an "Improvement in truss pads."

"I claim a truss consisting of a slotted pad N, a pad plate made of a slotted part G, and a part G^1, in combination with a sliding piece C, hinge J, J, and spiral spring F, when the parts are arranged in relation to each other as above set forth. Also a pad plate made in two parts G, G^1, the part G being adjustable so as to cause the pad attached to the pad plate to bear obliquely as above set forth."

No. 34,168. H. C. Small, of East Limington, Maine, for a "Combined writing case and checker board."

"I claim the checker board made of strips of wood or other suitable material attached together in the manner described, in combination with the writing case, the whole together constituting a new article of manufacture."

No. 34,169. Daniel C. Smith, of Adrian, Michigan, for an "Improvement in stump extractors."

"I claim the combination with a tackle block and rope of a beam A, with a shore B, and shoe D, attached thereto, the whole being mounted on two wheels and axle as above described, for the purposes set forth and described. 2nd, I claim the combination of the shivers F, F, F, for the purpose of allowing the team to draw at any angle, as above described. 3rd, I claim the combination with the chain 1, 1, of the windlass 9, drum 8, rope 7, windlass X, crank Z, and pawl Y, for the purposes set forth and described."

No. 34,170. John Taggart, of Roxbury, Mass., for an "Improvement in pegging machines."

"I claim the combination of the back latching mechanism (or stud *l*, and spring catch *m*,) and its unlatchable mechanism (or lever *h*, and cord *o*,) with the hammer and the peg driver. I claim my improved lasting mechanism having its parts constructed and applied in manner as set forth, and so as to operate together as described. I also claim the combination of the eccentrics b^2, the lever a^2, and their pitmen *y*, *z*, as applied to the shaft c^2, and each side of the lasting block and its heel and toe clamps as described."

No. 34,171. Nicholas Taliaferro, of Augusta, Ky., for an "Improvement in revolving ordnance."

"1st, I claim the arrangement of recessed front cheek I, I, i, i^1, rear cheek M, revolving breech N, O, R, and dove-tailed bearing P, Q, the whole being confined and operating substantially as set forth. 2d, the screw-threaded bush V, adapted for insertion within and removal from the rear end of the bore of a breech-loading cannon in the manner and for the object stated. 3d, supporting a cannon upon a downwardly projecting ball trunnion G, confined within a socket D, and resting upon an adjustable step E, all substantially as herein shown and explained. 4th, the described application of water pan W, inclosing the lower portion of the revolving breech N, O, R, as set forth."

No. 34,172. Seth D. Tripp, of Stoneham, Mass., for an "Improvement in machines for cutting welts for boots and shoes."

"1st, I claim the employment or use in connection with the feed rollers C, D, of a cutter L, arranged and connected with the yielding roller D, in such a manner as to be turned or adjusted automatically by the yielding movement of said roller substantially as and for the purp se set forth. 2nd, forming the cutting edge of the cutter L by means of the basils f, f, f^1, f^{11} which are respectively above, below, and at both sides of the cutter, as and for the purpose herein specified. 3rd, having the shaft E of the lower roller D fitted in a tube F, which is connected by a bar d, with a rock shaft G, and acted upon by a spring H, when said parts are used in connection with the cutter L, connected with the shaft G, and all arranged as and for the purpose set forth."

No. 34,173. J. E. Van Winkle and Joshua Mason, of Paterson, N. J., for an "Improvement in water meters."

"We claim the combination of the stationary partitioned slotted hollow receiving and discharging axis B, with the oscillating water box A, substantially in the manner herein shown and described, so that the water will enter, operate, and be discharged from the compartments of said box through the said axis, all as set forth. The combination of the air-connecting pipe D, with the compartments a, a^1, substantially as and for the purpose herein shown and described."

No. 34,174. C. P. S. Wardwell, of Lake Village N.H., for an "Improved planing machine."

"I claim the hinged bed plates L, L, arranged and operating substantially in the manner and for the purposes herein specified. I also claim the gauges D, D, adjustable on and in combination with the bed plates L, L, substantially as described. I also claim the combination of the adjustable edging saws G, G, with the hinged bed plates I, L, and adjustable gauges D, D, substantially as and for the purpose set forth. I also claim the combination of the vertically adjustable bed E, and hinged bed plates L, L, with the cutter head W, substantially as herein specified. I also claim the combination of the doubly adjustable guides A, A, with the hinged bed plates L, L, adjustable edging saws G, G, and gauges D, D, substantially as set forth. I also claim the combination of the smoothing cutters S, S, on the gauges D, D, with the edging saws G, G, for the purpose set forth. I also claim the obliquely situated serrated wheels R, R, (whether acting in connection with or in the place of the rollers Q, Q,) in combination with the gauges D, D, arranged and operating substantially as and for the purpose herein specified. I also claim the combination and arrangement of the sliding bars O, O, and their inclined projections n, n, and connecting lever P, with the inclined projections o, o, on the bottom of the hinged bed plates L, L, operating substantially as and for the purpose herein set forth. I also claim the combination of the two curved pressure and fender plates V, X, mounted respectively on hinged arms r, r, and w, w, and drawn down by springs v, v, with the cutter head W, substantially as herein specified."

No. 34,175. Dyer Williams, of Syracuse, N.Y., for an "Improvement of locomotive axles."

"I claim the improvement of locomotive engines by the employment of a crank axle constructed in the manner and for the purposes set forth."

No. 34,176. W. W. Wilson, of Collins Station, Illinois, for an "Improvement in corn planters."

"I claim the distributing wheels E, cups f, hoppers F, G, frames g, rods a, conducting tubes b, adjustable plows I, standards J, J, guides c, and double brackets d, with the frame of the machine, when combined, arranged, and operating in the manner described."

No. 34,177. John F. Winslow, of Troy, N.Y., for an "Improved machine for compressing puddle balls."

"I claim the combination of the steam cylinder (F), the ram or hammer (R), the cam wheel (C), with each other, substantially as and for the purpose herein described and set forth."

No. 34,178. Alfred M. Bailey and John O. Couch, of Middlefield, Conn, assignors to The Metropolitan Washing Machine Co., of same place, for an "Improved clothes wringer."

"We claim in clothes wringing machines having rollers A, B geared together at one end by gear wheels M, N, constructing and arranging the spring or springs, and the stop H, or its equivalent, substantially as and for the purposes herein set forth."

No. 34,179. John W. Barker and James P. Hackin, of Syracuse, N.Y., for an "Improvement in purifying common salt."

"We claim the mode of decomposing the impurities in common salt, by immersing or washing it in a solution of any one or more of the carbonates of ammonia, or of any one or more of the sulphates of potash, soda, or ammonia, or of any combination of any of the above named salts, in saturated brine, as above set forth, through which means the chemical results stated are produced."

No. 34,180. Ralph Emerson, jr., and F. Graham, of Rochford, Illinois, assignors to Ralph Emerson, jr., of same place, for an "Improvement in mowing machines."

"We claim the combination of the bent axle e, and hand lever G, with the arm F, and bracket f, when arranged for joint operation relatively to each other and to the machine, substantially in the manner herein described, for the purpose set forth."

No. 34,181. Ralph Emerson, jr., and F. Graham, of Rochford, Illinois, assignors to Ralph Emerson, jr., of same place, for an "Improvement in harvesters."

"We claim the combination of the gearing frame, finger beam, shoe, and drag strap, with the lifting lever F, and detent standard G, when the whole are arranged for joint operation substantially in the manner herein described, for the purpose set forth. We also claim constructing the finger beam of a single sheet of metal bent near its centre into a U-shape, so that the upper part shall project beyond the lower a sufficient distance to form a ledge to which the guard fingers may be secured, substantially in the manner herein described. We also claim fastening the guards to the upper part only of the finger beam bent as described in combination with the shoulders upon the shanks of the fingers, substantially in the manner herein described."

No. 34,182. Marks Fishel, of New York, N.Y., assignor to himself and Adolph Opper and Leo Papper, of same place, for an "Improvement in skeleton skirts."

"I claim securing the hoops A, A, to the tapes B, B, by means of fastenings D, or their equivalents, passing through the eyelets C, C, and across a portion of the tape between them, substantially as and for the purposes herein set forth."

No. 34,183. J. H. Linville, of Altoona, Pa., assignor to himself and L. J. Piper, of same place, for an "Improvement in iron truss bridges."

"I claim, first, the construction of the lower chords of truss bridges of series of wide and thin-drilled eye-bars C, C, applied on edge between ribs S, S, on the bottoms of the posts, and connected by pins P, P, supported in the diagonal tension braces D, D and E, all substantially as herein described. Second, the posts O, A, L, O, A, L, composed each of two wrought iron plates or bars a, a, distance pieces b, b, and rivets J, J, or their equivalents, and cast-iron braces L, L, and capitals O, O, the whole combined as herein specified."

No. 34,184. Marcus P. Norton, of Troy, N.Y., assignor to himself and Charles Eddy and Co., of same place, for "Hand stamp for post offices."

"I claim the combination of four cylinders (a, b, c, d,) upon the shaft (C), with the stationary form of type (D, D), whereby the day, month, and year are given together by one

impression, substantially as herein described and set forth. I also claim the combination of the shaft (C), with four cylinders (*a*, *b*, *c*, *d*,) thereon arranged, with the frame (B), whereby the said cylinders are firmly held to their adjusted position, substantially as herein described and set forth."

No. 34,185. Allen Walton and John L. Kite, of Philadelphia, Pa., assignors to Allen Walton, of same place, for an "Improvement in process of manufacturing illuminating gas."

"We claim injecting a steady and continuous stream of air into a retort in which gas is generated from coal oil, or its equivalent, as and for the purpose herein set forth."

No. 34,186. John Powers and E. M. Smith, of New York, N.Y., assignors to John S. Mitchell, of same place, for an "Improvement in harvesters."

"We claim, 1st, the attaching of the finger bar A to the main frame G of the machine, by means of the bars D, D, connected by joints *a*, *a*, to the upright sliding bars F, F, on the main frame G, substantially as and for the purposes herein set forth. 2nd, the use of guard fingers having backs *h*, and edges *k*, *k*, extending continuously along the bar, so as to present closed surfaces in front and beneath, and formed with channels or grooves *i*, extending beneath the sickle bar and partially around the bolt holes *l*, and open at back, to permit the ready escape of moisture, dirt, gum, or trash, which may work underneath the sickle bar. 3rd, having the bar N, which forms a portion of the lifting or elevating mechanism of the finger bar A, fitted loosely underneath the main frame H, to admit of longitudinal play of said bar, for the purpose of allowing the finger bar to be turned up against the main frame, as set forth."

Re-issues.

No. 1257. American Flask and Cap Company, of Waterbury, Conn., assignees of Charles Hicks, of Haverstown, N.Y., for an "Improvement in machine for varnishing percussion caps."—Patented 17th February, 1857.

"We claim, 1st, a series of rods *b*, or their equivalents connected by any suitable means, and a plate A, perforated at distances to correspond with the rods employed in combination to apply varnish or other material to a number of caps simultaneously. 2nd, the combination of a frame *c*, *c*,[1] *c**, carrying a number of wires or rods *b*, *b*, or their equivalents, to take up the varnish, a trough E to contain the varnish, and suitable guides above the said trough to receive a plate which carries the caps, the whole being constructed and operating together, substantially as herein described. 3rd, the plate H, containing holes corresponding in number and arrangement with the wires or rods *b*, *b*, or their equivalents arranged relatively to the trough F, the vertically moving frame *c*, *c*,[1] *c*,* and the guides G, substantially as herein described, for the purpose set forth."

No. 1258. J. H. Dennis, of Louisville, Kentucky, for an "Improved mode of collecting fares on street railway cars."—Patented 17th December, 1861.

"I claim as an improvement in street railroad cars the combination of the platformless rear, either without a door, or with one for exit only, with the platform and door in front, whereby all persons entering the car being compelled to pass the driver, he can without inconvenience act as collector or oversee the deposit of their fares."

No. 1259. Harrison, Kalbach, and Mary Andrews, of Bernville, Pa., acting executrix of Abraham Andrews (deceased), of same place, for an "Improvement in horizontal water wheels."—Patented 30th August, 1859.

"We claim, 1st, the curved concave buckets, having curved or eccentrically formed tops and bottoms, as described. 2d, in combination with the buckets curved as described, the spiral water-way or chamber underneath them, arranged within a box A, substantially as shown and described."

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 21st January, 1862, and each bearing that date.

No. 34,187. T. C. Andrews, of Leverington, Pa. for an "Improvement in tobacco pipes."

"I claim the tobacco holder C, with its perforated base and the flange *e*, or its equivalent, when applied to the bowl of a pipe, and serving as a detachable lining for the same, as and for the purpose set forth."

No. 34,188. Lewis Baird, of Cambridge, Massachusetts, for an "Improved mode of preventing incrustation in steam boilers."

"I claim the employment of tobacco, or a decoction or extract of the same, for the purpose of preventing the incrustation of steam boilers, or of removing the scale therefrom."

No. 34,189. John E. Baldeston, of Philadelphia, Pa., for an "Improved splicing bar for axles."

"I claim the splicing bar A, with its journal *b*, and the strap bolts *c*, *e*, the whole being constructed and arranged for application to a broken axle, as and for the purpose herein set forth."

No. 34,190. M. W. Baldwin, of Philadelphia, Pa., for an "Improved rotary engine."

"I claim the flexible diaphragm and disc, in combination with the rollers, whereby, by the action of steam or other fluids between the diaphragm and disc, the rollers are propelled in the manner above described."

No. 34,191. Charles Beidler, of Allentown, Pa., for an "Improvement in plows."

"I claim attaching the 'nose' F to the plow by means of the screw bolt *c*, passing through projections *a*, *b*, of the landside and mould board, and provided with the collar *f* and share brace *g*, all arranged as and for the purpose set forth."

No. 34,192. Magnus Benas, of New York, N.Y., for an "Improved tanning composition."

"I claim the employment or use for tanning purposes of a decoction of rhatany, tormentilla, and granadilla roots, in connection with cinchona and cascarilla barks, substantially in the proportions specified, and using said solution with Bombay catechu, alum, and common salt, in the proportions about as specified, and substantially as herein described."

No. 34,193. Thomas Blanchard, of Boston, Mass., for an "Improved scoop shovel."

"I claim a scoop-shovel with a bent rim or side B, having a handle A and bottom E attached to it, constructed substantially as shown and described."

No. 34,194. James F. Brooks, of Stafford Springs, Conn., for an "Improvement in road scrapers."

"I claim, 1st, the attaching of the scraper C to the frame A of the machine, substantially as shown, to admit of the scraper being adjusted in a more or less inclined position, for the purpose specified. 2nd, attaching the draught pole B to the frame A, in the manner substantially as shown, to admit of the pole being adjusted either at right angles with the scraper, or obliquely therewith, for the purpose set forth. 3rd, the combination of the adjustable scraper C and draught pole B, arranged for joint operation as and for the purpose described."

No. 34,195. John Bullard, of Stockbridge, Vermont, for an "Improvement in apparatus for distilling coal oil."

"I claim an egg-shaped retort arranged substantially as described, with draft opening at its lower end so that the unburned contents of the retort will always be within the lines of the draft, all as set forth. 2nd, in a retort in which the distillation is effected by the gradual burning away of the charge toward the outlet. I claim the introduction of steam into and through the bottom substantially as and for the purpose herein specified. 3rd, the combination with the outlet of the retort of a still which has its interior pipes provided with a cold water injection as and for the purpose herein shewn and described."

No. 34,196. Alfred Burchard, of Sylvan, Michigan, for an "Improvement in iron cutters or sleighs."

"I claim the construction and use of wrought iron or steel braces, supports, bolts, and nuts, when used and in combination with the running parts of the sleighs or cutters made exclusively of wrought iron or steel in manner and form and for the purposes as herein described."

No. 34,197. Lorenzo D. Cowles, of Armada, Michigan, for an "Improvement in carriages."

"I claim, 1st, the combinatien of the springs E, G, attached to the axle of a two-wheeled carriage by means of a rolling joint *e*, *f*, with the stationary spring F, when arranged and operating in the manner set forth. 2nd, the combination of the volute springs H, J, with the rolling springs E, G, and stationary spring F, when arrauged in the manner described."

No. 34,199. Joseph H. Connelly and J. W. Phillips, of Wheeling, Va., for an "Improved steam boiler furnace."

"We claim, 1st, the introduction of petroleum or well-oil, into the furnace of steam-boilers by means of the steam jet or pipes for the purpose of facilitating the combustion of the gases of the fuel, whether wood or coal. 2nd, we also claim the side furnace '*a*' in connection with the boiler '*b*,' reservoir '*d*,' steam pipes '*c*,' and oil-pipes '*e*,' constructed and arranged substantially as and for the purposes specified."

34,199. Alanson Cary, of Worcester, Mass., for an "Improvement in starting apparatus for horse railroad cars."

"I claim, first, the combination with one of the wheels on the axletree of a rail car, of a ratchet wheel E, or its equivalent, and two dog levers F, F^1, provided with dogs or moving pawls substantially as and for the purposes set forth. Second, the combinatlon of a ratchet wheel or device fast to one of the wheels of a rail car as setforth, and a suitable pawl device suspended so as to be free to vibrate or oscillate around the axis of said wheel, with suitable mechanism so constructed and combined with the body and platform of the car as to enable the driver to start the car while attending to his team at the front of the car for the purposes set forth. Third, the peculiar construction and relative arrangement of dog levers F, F^1, whereby the pawls and stop devices are well protected by their flanges *d*, *d*^{1}, and whereby one is made to fit and work against the other like a rule joint, and operating levers G, G^1, are brought one over the other as shown. Fourth, operating the dog levers F, F^1, by means of the hand crank L, at the front of the car substantially as shown and described. Fifth, the of throwing the operating dogs in and out of action with the ratchet teeth substantially as described. Sixth, forming the operating dogs *e*, *e*, in the peculiar manner set forth, and as shown in Fig. 6 of the accompanying drawings. Seventh, the combination of the dog levers F, F^1, with the tubular projection C^1 of box C, whereby all friction and wear of the parts, when the starting device is not in operation, is avoided, as described. Eighth, the combination of the tubular brake shaft K, with its hand crank L^1, and hand crank L, with its central shaft, with the fender board on front of the car, substantially as described."

No. 34,200. John Duke, of Milesburg, Pa., for an "Improved roofing."

"I claim a roof constructed in the manner and of the materials above set forth."

No. 34,201. M. Easterbrook and J. M. Wood, of Geneva, N. Y., for an "Improvement in machines for peeling willow."

"We claim, 1st, the two pressure wheels D, F, when provided respectively the one with a V-shaped groove *b*, and the other with a beaded projection *c*, and used in combination with a stripping device formed of the projections *m* of plate L, for the purpose set forth. 2nd, the projections *m* attached to yielding slides *i*, which are fitted in a plate L between the bars K, K, and arranged in relation with the wheels D, F, to operate as and for the purpose specified. 3d, the combination of the wheels D, F^1, projection *m* of the plate L, rotary brushes M, M, and discharging rollers N, N, all arranged for joint operation as and for the purpose set forth."

No. 34,202. John D. Flansburgh, of Philadelphia, Pa., for an "Improved culinary pot."

"I claim as an improved article of manufacture the culinary pot described, the same having the supplementary handle *c* cast thereon, substantially as set forth and for the purposes specified."

No. 34,203. Bradby W. Franklin, of New York, N. Y., for an "Improved fusible gauge for temperatures."

"I claim the above-described fusible gauge, the fusible alloys being used in the peculiar manner specified, thus indicating the temperature by the condition of the alloy, whether the same be granular, semifluid, or fluid, substantially as set forth."

No. 34,204. Wm. C. Goodwin, of Hamden, Conn., for an "Improved folding arm chair."

"I claim the folding arm-chair made with double seat rails, when the substance used for the sacking or seat also constitutes the hinges, and the whole is constructed and fitted for use substantially as herein described."

No. 34,205. A. Horace Hastings, of New York, N. Y., for an "Improved refrigerator."

"I claim the within-described refrigerator as an article of manufacture, constructed, arranged, and used in the manner and for the purpose specified."

No. 34,206. Obadiah Hopkins, of New York, N. Y., for an "Improvement in defending redoubt, by shells."

"I claim the application of the mechanical device, or its equivalent, for elevating and exploding shell above the covering at the apex, substantially as and for the purposes herein specified."

No. 34,207. Charles T. James, of Providence, R. I., for an "Improvement in hot projectiles for ordnance."

"I claim making elongated shot with a separable point, which can be readily taken off and put on, substantially as and for the purpose specified. And I also claim making elongated shot with a separable point, substantially as described, in combination with the separable packing, or the equivalent thereof, to be expanded by the force of the discharge, substantially as and for the purpose specified."

No. 34,208. Rannah Justis, of Dublin, Indiana, for an "Improvement in churns."

"I claim the horizontal open volute dasher E, having door G, wings I, and attachable shaft C, as and for the purposes set forth."

No. 34,209. Samuel D. Kendall, of Brooklyn, N.Y., for an "Improvement in truss girders for bridges."

"I claim the arrangement and combination substantially as herein described of the chords A, B, C, posts D, D*, braces E, E, tension rods G, G, binding blocks F, F, and couplings *h*, *h*, the whole forming a truss giver for bridge or other structure."

No. 34,210. Thomas Langham, of Philadelphia, Pa., for an "Improvement in knitting machines."

"I claim producing a circular ribbed fabric by means of a series of self-acting needles, so arranged in radia grooves of two stationary plates, and so operated that some of the needles shall operate on the outside of the fabric, while others operate on the inside of the fabric, as specified. Secondly, the employment of radial reciprocating needles made self-acting at both ends, combined with the devices herein described, or their equivalents, whereby the said needles may be so transposed as to operate either on the inside or outside of the fabric without any interruption of the forces of knitting, as herein set forth for the purpose specified."

No. 34,211. Lowell G. Merrill, of Angels, California, for an "Improved mode of chopping to pieces ships or other wooden substances under water."

"I claim the construction and arrangement of the several parts A, B, C, D, E, and *a*, in the manner described, to be operated by the action of the water, as described, for the purposes stated."

No. 34,212. F. S. Merritt, of New York, N.Y., for an "Improvement in cooking ranges."

"I claim, 1st, the combination of a fire brick C and water back E, arranged at the back part of the fire chamber A of a cooking range, so as to form a cylinder or a frustum of a cone and be rotated, so that either the fire brick or the water back may form the back of the fire chamber, as described. 2nd, the air heating chamber F, interposed between the fire brick C and water back E, when the same are suspended and made to rotate, as and for the purpose specified. 3rd, the tubular trunnions *a*×, provided with passages *d*, *d*^{1}, in combination with the sockets *b*×, *b*××, provided with the

holes or openings *e*, *e*, and arranged and applied to the rotating water back E, as shown, to automatically stop and start the flow of water through the water back E, as set forth. 4th, rotating the frustum D by means of the pins or teeth *f*, and screw H, when the latter is placed or formed on a rod I, which passes through the range at one side of the fire chamber, so that the frustum can be turned by the operator or attendant at the front of the stove."

No. 34,213. Albert W. Morse, of Eaton, New York, for an "Improvement in track clearers in mowing machines."

"I claim, 1st, a track clearer to a grass harvester, capable of being expanded vertically and adjusted laterally, in combination with an adjustable handle, attached to it in such a manner as to regulate its capacity as circumstances may require, substantially and for the purposes herein set forth. 2nd, the adjustable handle M, when combined with a track clearer by means of the socket and fastening, substantially as and for the purpose specified."

No. 34,214. James Piercy, of Bloomfield, N.J., for an "Improvement in washers for paper pulp."

"I claim the combination of the washer B, its journal box *e*, and the valve board C, under a method of construction and operation, substantially as above described."

No. 34,215. B. F. Ray, of Baltimore, Maryland, for an "Improvement in harvesters."

"I claim, 1st, making the frame-bar and the frame of the cutter-bar of one continuous piece, having the curved part (X) as described. 2nd, I claim the arrangement of the bearings and bases of the rocker shaft in combination with the friction roller and cam groove as described."

No. 34,216. Abraham T. Russel, of New York, N.Y., for an "Improved cork-screw."

"I claim the application of the cam or excentric and piston as a leverage or power to attach to corkscrews for drawing corks or stopples from bottles."

No. 34,217. William Sellers, of Philadelphia, Pa., for an "Improvement in mode of transmitting and arresting motion."

"I claim, 1st, the described device for transmitting and arresting rotary or vibrating motion, consisting of a ratchet wheel and pawl, when the ratchet wheel is the driver, combined with a stop or stops, the whole operating substantially in the manner set forth. 2nd, the employment of a friction pad, or its equivalent, in connection with a ratchet wheel, pawl, and stop or stops operating substantially in the manner and for the purpose specified. Thirdly, combining with the described device for transmitting and arresting motion, adjustable stops, for the purpose of varying the motion transmitted to any desired portion of a revolution, as herein set forth."

No. 34,218. Charles A. Slack, of Frenchtown, N.J., for an "Improvement in wagon and carriage brakes."

"I claim the employment in combination with the body J and bolsters F, G, of the inclined blocks K, substantially as and for the purpose herein shown and described."

No. 34,219. E. Smith, of Cold Spring Harbor, N.Y., for an "Improvement in harvesters."

"I claim the pawl W, actuated from the pulley F, substantially as shown in connection with the plate U, provided with the serrated edge *f*, and fitted on the shaft M, all being arranged to operate as and for the purpose set forth. I further claim in combination with the pawl W, and serrated plate U, arranged as shown, the pulley F, connected with the main frame A by the cord or chain K, cam H, and lever I, the pulley, cam, and lever being attached to the draught pole C, and all arranged substantially as and for the purpose specified."

No. 34,220. Moritz Strange, of New York, N.Y., for an "Improvement in pianofortes."

"I claim the arrangement of the pins *f*, with the pins *e*, *e*, and strings *c*, *c*, as herein shown and described."

No. 34,221. Erastus N. Steere, of Providence, R.I., for an "Improvement in spindle bolsters."

"I claim the combination of the isolated absorbent S, and the passages or conductors *e*, *e*, in connection with the ordinary metal bearing of a spindle bolster, the same being arranged and operating substantially as herein described for the purpose specified."

No. 34,222. Suspended.

No. 34,223. Samuel S. White, of Philadelphia, Pa., for an "Improvement in the manufacture of artificial teeth."

"I claim the manufacture of mineral teeth with pins having heads *d*, *d*, *d*, at their outer ends, substantially as and for the purpose herein specified."

No. 34,224. William E. Worthen, of New York, N.Y., for an "Improvement in architectural sheet metal."

"I claim the new article of manufacture herein described, which I term architectural sheet metal."

No. 34,225. Horace B. Ames, of Brooklyn, N.Y., for an "Improvement in hoop skirts."

"I claim the employment of a piece of leather, or equivalent material, between the metallic clasp and the tape or cord for the purposes and as specified."

No. 34,226. C. R. Alsop, of Middletown, Conn., assignor to J. W. Alsop, of New York, N.Y., for an "Improvement in revolving fire-arms."

"I clam the combination of the hammer cam I with the rearward extremity of the axis pin D, in the manner and for the purpose herein shown and described."

No. 34,227. Nathan Ames, of Saugres Centre, Mass., assignor to The Goodyear India Rubber Stopple Co., of Boston, Mass., for an "Improved bottle stopple."

"I claim, first, as a new article of manufacture a stopple consisting of a band, case, or thimble R of rubber, or any of its compounds, and a core W of wood or other material, substantially as described and for the objects specified. Second, constructing the core W with an annular depression *d*, for the purpose of confining the rubber, and allowing the same to be of greater thickness where the most elasticity is required. Third, constructing a stopple with a core W, rubber band, case, or thimble R, and a thin coating of gutta percha G, substantially as described and for the objects specified."

No. 34,228. Stephen Curtis, jr., of New York, N.Y., assignor to himself and Henry Yale, of same place, for an "Improved ice pitcher."

"I claim the construction and use in ice pitchers or other vessels of the spring bottom C, supported upon springs, so as to yield to the impact of masses of ice or the like, and preserve the true bottom of the vessel, substantially in the manner and with the advantage herein set forth."

No. 34,229. Jehu Hatfield, of Troy, N.Y., assignor to Percy and King, of same place, for an "Improvement in machines for making paper boxes."

"I claim the sliding bar F with the roller G attached, in connection with the stationary bar or bed C, spring E, slide H, and bar *a*, arranged substantially as and for the purpose set forth."

No. 34,230. Henry Howson, of Philadelphia, Pa., assignor to W. F. Warburton, of same place, for an "Improved box for matches."

"I claim the receptacle B with its projecting front and open top, when so hung to and so combined with an outer frame or casing A, of such a shape that the latter shall form a cover for the said receptacle, and when the latter is rendered by a weight or otherwise self closing against the cover, substantially as set forth for the purpose specified."

No. 34,231. J. A. Pease, of New York, N.Y., assignor to Claudius A. Pease, of same place, for an "Improvement in tobacco pipes."

"I claim the combination of the perforated plug or cylinder A with the piston E and case or cylinder C, in which it moves, as described."

No. 34,232. Willard A. Furness, of Quincy, Ill., for an "Improvement in coach and furniture varnish."

"I claim the use of coal oil or kerosene and yellow wax as ingredients in the making of coach or furniture varnish out of the ordinary gums and driers used for this purpose, and as herein set forth."

Re-issue.

No. 1260. Frederick E. Sickels, of New York, N.Y., for an "Improvement in steam engines."—Patented 19th September, 1845, extended.—Re-issued 21st February, 1860, No. 910.

"I claim imparting a co-existing movement to two reciprocating catch pieces in the operation of the trip off cut off valves, substantially as described."

Designs.

No. 1517. Stephen D. Arnold, of New Britain, Conn., assignor to P. and F. Corbin, of same place, for a "Design for a lift or handle."

No. 1518. John B. Earnshaw, of Cincinnati, Ohio, for a "Design for a monument."

Nos. 1519-1520. Elemir J. Ney, of Lowell, Mass., assignor to The Lowell Manufacturing Company, of same place, for a "Design for carpets, &c."—Two Patents.

List of Specifications published during the week ending 8th February, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
1622	3*d.*	Brown, J.—Manufacture of iron.
1623	3*d.*	Warren, F.—Cotton gin.
1624	9*d.*	Stevens, C.—(*A communication from L. Marque.*)—Nose band for stopping run-away horses
1625	10*d.*	Stevens, C.—(*A communication from L. F. F. David.*) — Brick-making machine.
1626	1*s.* 4*d.*	Sacré, A.—Preparing and spinning flax, &c.
1627	3*d.*	Brown, J.—Window frames and blinds.
1628	9*d.*	Fowler, J., junior.—Machines for ploughing and tilling by steam power.
1629	9*d.*	Wenton, S.—Ventilating apparatus.
1630	7*d.*	Holland, W.—Suspending and raising and lowering window sashes.
1631	3*d.*	Redfern, J.—Warming buildings.
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(*11th, 12th, and 13th February*, 1862.)

350. WILLIAM HENRY WEAVER, of Edington, Bridgnorth, in the county of Salop, Agricultural Engineer, and CHARLES GALL, of Bridgnorth, in the said county, Engineer, for an invention of "Improved machinery for agricultural purposes."—Dated 11th February, 1862.

351. THOMAS FYFE, of 46, Leicester Square, in the county of Middlesex, Engineer, for an invention of "Improvements in knapsacks and in apparatus for supporting them or other similar burdens upon the shoulders."—Dated 11th February, 1862.

352. CORNELIUS BONELL, of Wednesbury, in the county of Stafford, Engineer, and WILLIAM MORTIMER SPIRING, of Wednesbury aforesaid, Engineer, for an invention of "A new or improved rotary engine."—Dated 11th February, 1862.

353. ELLIS SUTTON, of Radcliffe, in the county of Lancaster, Cotton Spinner, for an invention of "A certain improvement in machinery or apparatus for preparing cotton and other fibrous substances for spinning."—Dated 11th February, 1862.

354. WILLIAM MACNAB, of Greenock, in the county of Renfrew, North Britain, Engineer, for an invention of "Improvements in steam engines."—Dated 11th February, 1862.

355. WILLIAM LYALL, of Amiens, in the department de la Somme, France, for an invention of "Improvements in machinery for preparing flax, hemp, and other fibrous substances."—Dated 11th February, 1862.

356. WILLIAM WOOD, of Monkhill, Pontefract, in the county of York, for an invention of "Improvements in the manufacture of pomfret or liquorice cakes."—Dated 11th February, 1862.

357. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in smoothing irons."—A communication to him from abroad by Charles Jean Baptiste Eugène Cailloué, of Paris, in the empire of France.—Complete specification.—Dated 11th February, 1862.

358. JOHN BRINSMEAD, of Charlotte Street, Fitzroy Square, in the county of Middlesex, Pianoforte Manufacturer, for an invention of "Improvements in pianofortes."—Dated 11th February, 1862.

359. RICHARD JOHNSON, of Manchester, in the county of Lancaster, Wire Drawer, for an invention of "Improvements in welded wires used for telegraphic and other purposes."—Dated 11th February, 1862.

360. GUSTAV LINDEMANN, of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in applying gas for the purpose of singeing or dressing yarns or threads and woven fabrics, and for obtaining heat for other purposes."—Dated 11th February, 1862.

361. JAMES JENNINGS MCCOMB, of Pump Court, Temple, in the county of Middlesex, Gentleman, for an invention of "An improved fastening for securing cotton and other bales or packages."—Dated 11th February, 1862.

362. FRANCIS JOHN BOLTON, of 7, Bolton Row, Mayfair, in the county of Middlesex, Captain in H.M's. 12th Regiment of Foot, for an invention of "Improvements in rifle and gun stoppers and oil bottles."—Dated 11th February, 1862.

363. JOHN HETHERINGTON, of Manchester, in the county of Lancaster, Machine Maker, for an invention of "Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning."—Dated 11th February, 1862.

364. Godfrey Joachim Aman, of Liverpool, in the county of Lancaster, Merchant, for an invention of "Transparent envelopes, bags, or wrappers, and appendages thereto, for holding parcels or samples of grain and other dry substances, chiefly applicable for transmission by post at lower rates of postage."—Dated 12th February, 1862.

365. Frederick Tolhausen, Civil Engineer and Patent Agent, 17, Rue du Faubourg Montmartre, Paris, in the empire of France, for an invention of "A new system of vertical steam boilers."—A communication to him from Jean Larmanjat, Mechanical Engineer, a person resident at No. 24, Rue du Mail, Paris.—Dated 12th February, 1862.

366. John Robb, of the city of Aberdeen, North Britain, Merchant, for an invention of "Improvements in ventilating."—Dated 12th February, 1862.

367. James Brickhill, of No. 5, Stepney Causeway, Commercial Road East, in the county of Middlesex, Mechanic, for an invention of "Improvements in the cylinders and pistons of steam engines."—Dated 12th February, 1862.

368. Thomas Coltman, of Leicester, Machinist, for an invention of "Improvements in sewing machines."—Dated 12th February, 1862.

369. Andrew Hinshaw, of Aldermanbury Postern, in the city of London, Manufacturer, for an invention of "Improvements in hooped skirts."—A communication to him from abroad by John Coulthard Kelley, of New York, United States of America.—Dated 12th February, 1862.

370. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in preparing and ornamenting cast iron and other metals in order to fit them for articles of furniture and decoration and other uses."—A communication to him from abroad by Jean Baptiste Godin, of Guise, France.—Dated 12th February, 1862.

371. John Stephen Joseph, of Rhostyllan, near Wrexham, in the county of Denbigh, North Wales, for an invention of "Improvements in coke ovens, and in utilizing the waste heat from the same."—Dated 12th February, 1862.

372. Thomas Spencer, of Liverpool, in the county of Lancaster, Engineer, for an invention of "Improvements in propellers for navigable vessels, and engines for actuating the same, parts of which are applicable to other purposes."—Dated 12th February, 1862.

373. Alexander Samuelson, of 28, Cornhill, in the city of London, for an invention of "Improvements in building ships and vessels."—Dated 12th February, 1862.

374. Thomas Horsley, junior, of 10, Coney Street, York, Gun Maker, for an invention of "Improvements in breech-loading fire-arms."—Dated 12th February, 1862.

375. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in projectiles."—A communication to him from abroad by James Woodbury and Solomon Gray, both of Boston, county of Suffolk and state of Massachusetts, United States of America.—Dated 13th February, 1862.

376. John Stephen Joseph, of Rhostyllan, near Wrexham, in the county of Denbigh, North Wales, for an invention of "A retort oven, and the utilization of the spare heat from the same."—Dated 13th February, 1862.

377. John Peters, of Ulverston, in the county of Lancaster, Engineer, for an invention of "Improvements in portable steam engines applicable to locomotive, stationary, and marine engines."—Dated 13th February, 1862.

378. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in the disinfection of animal excretions, and in the extraction therefrom of fertilizing elements for agricultural purposes."—A communication to him from Alfred Marie Celestin Edgard Goussard, a person resident at No. 16, Rue d'Enghien, Paris, (France).—Dated 13th February, 1862.

379. William Williams, of Bath, in the county of Somerset, Pianoforte Maker, for an invention of "Improvements in pianofortes."—Dated 13th February, 1862.

380. William Hewitt, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in rein holders."—Dated 13th February, 1862.

381. Alfred Charles Ebbutt, Upholsterer, of 25, Blackman Street, Boro' of Southwark, and 20, 33, and 34, High Street, Croydon, in the county of Surrey, for an invention of "An improved self-adjusting principle to be applied to reclining, easy, or other chairs."—Dated 13th February, 1862.

382. William Henry Brown, of Camberwell, in the county of Surrey, Paymaster, Royal Navy, for an invention of "An improvement in yards, fore and aft booms, and gaffs."—Dated 13th February, 1862.

383. Charles Denton Abel, of 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in towing boats or other vessels on rivers, and in apparatus employed for that purpose."—A communication to him from abroad by Jean François Cail, residing in Paris, in the empire of France.—Dated 13th February, 1862.

384. Thomas Davison, of Belfast, in the county of Antrim, Ireland, Engineer, for an invention of "Improved means for preventing the corroding of steam boilers."—Dated 13th February, 1862.

385. Francis Falconer, of Glasgow, in the county of Lanark, North Britain, Warehouseman, for an invention of "Improvements in lamps."—Dated 13th February, 1862.

386. Joseph Fearns Lawton and John Lawton, of Vale Mill, Micklehurst, near Stalybridge, in the county of Cheshire, for an invention of "Improvements in the manufacture of flannel for shirtings and other articles of apparel."—Dated 13th February, 1862.

387. Richard Hornsby, junior, of the Spittlegate Works, Grantham, in the county of Lincoln, for an invention of "Improvements in apparatus for

threshing, elevating, cleansing, and separating grain, and in apparatus for elevating straw."—Dated 13th February, 1862.

388. William Daniel Allen, of Laithfield House Norfolk Road, Sheffield, for an invention of "Improvements in the manufacture of stamp heads and beds employed in crushing ores and other mineral substances."—Dated 13th February, 1862.

389. George Crisp Burrows, of Stoke Holy Cross, in the county of Norfolk, Yeoman, for an invention of "Improvements in lounges, seats, or other apparatus for sitting or reclining on, which improvements are also applicable to rocking horses."—Dated 13th February, 1862.

390. Edward Ellis Allen, of 5, Parliament Street, in the county of Middlesex, Engineer, and John Stewart, of Blackwall, in the county of Middlesex, Engineer, for an invention of "Improvements in the construction of steam-engines."—Dated 13th February, 1862.

391. James Edward McConnell, of Wolverton, in the county of Buckingham, Engineer, for an invention of "Improvements in parts of boilers and furnaces for locomotive and other engines."—Dated 13th February, 1862.

392. Edwin Green, of the firm of Green and Cadbury, Button Manufacturers, of Birmingham, in the county of Warwick, and James Newman, Jeweller, also of Birmingham aforesaid, for an invention of "Certain improvements in buttons for fastening and ornamenting articles of dress."—Dated 13th February, 1862.

393. James Edward McConnell, of Wolverton, in the county of Buckingham, Engineer, for an invention of "Improvements in railway breaks and in warming railway carriages."—Dated 13th February, 1862.

394. Adolphus Jansen, of Brussels, in the kingdom of Belgium, Arquebusier, for an invention of "A new ball for fire-arms."—Dated 13th February, 1862.

395. William George Valentin, of the Royal College of Chemistry, Government School of Mines, Oxford Street, in the county of Middlesex, Chemist, for an invention of "An improved mode of and apparatus for coking coal."—Dated 13th February, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2512. To Isaac Evans, junior, Collier, of Cefn Mawr, Ruabon, in the county of Denbighshire, North Wales, for the invention of "An improved miners' lamp."

On his petition, recorded in the Office of the Commissioners on the 8th day of October, 1861.

2797. To Theodore Schwartz, of the city and state of New York, United States of America, for the invention of "Improvements in the construction of air engines or air motors."

On his petition, recorded in the Office of the Commissioners on the 7th day of November, 1861.

2811. To David Cowan, of Hungerford Street, Strand, in the county of Middlesex, Manufacturer, for the invention of "Improvements in the construction of pneumatic subaqueous tubes for passenger or goods traffic, and in machinery for the manufacture thereof."

On his petition, recorded in the Office of the Commissioners on the 9th day of November, 1861.

2923. To James Harrow Jeffs, of Tottenham Court Road, in the county of Middlesex, for the invention of "Improvements in the manufacture of collars, shirt-fronts, cuffs, hats, bonnets, vests, and other articles of wearing apparel."

On his petition, recorded in the Office of the Commissioners on the 21st day of November, 1861.

3023. To William Pellew Bain, of Blackwall, in the county of Middlesex, Doctor of Medicine, for the invention of "Improvements in protecting ships' bottoms from fouling."

On his petition, recorded in the Office of the Commissioners on the 2nd day of December, 1861.

3079. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improved natatory apparatus."—A communication to him from Léon Lejuste, a person resident at No. 63, Rue de Canteleux Douai, France.

3080. And to Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "A new or improved combination of microscopic photographs and lenses with certain precious stones or imitations thereof."—A communication to him from Louis Henri Bouillette and Jean Amable Hyvelin, persons resident at No. 31, Rue Michel-le-Comte, Paris, France.

On both his petitions, recorded in the Office of the Commissioners on the 9th day of December, 1861.

3205. To Timothy Morris and Robert Weare, both of Birmingham, in the county of Warwick, Electricians, and Edward Henry Cradock Monckton, of Fineshade, in the county of Northampton, Esquire, for the invention of "Improvements in submarine and other telegraphic communication, and in apparatus connected therewith."

On their petition, recorded in the Office of the Commissioners on the 21st day of December, 1861.

3273. To Jean Baptiste Cretal, of Saint Malo, in the empire of France, Manufacturer, for the invention of "A new process of colouring smoking pipes."

On his petition, recorded in the Office of the Commissioners on the 31st day of December, 1861.

39. To Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the invention of "An improved manufacture of cigars."—A communication to him from abroad by William Chevers Kneeland, of New York, in the United States of America.

On his petition, recorded in the Office of the Commissioners on the 6th day of January, 1862.

58. To Henry Cook, of Manchester, in the county of Lancaster, Gentleman, for the invention of "An improved mode of, and apparatus for, transmitting despatches and small articles by the agency of electricity."—A communication to him from abroad by Gaetano Bonelli, of Milan, in the kingdom of Italy.
On his petition, recorded in the Office of the Commissioners on the 8th day of January, 1862.

66. To Joel Haywood Tatum and William James Williams, of New York, United States of America, but now residing at Arundel Street, Strand, in the county of Middlesex for the invention of "Improvements in the manufacture and structure of wicks, and in the application of the same to the of manufacture of candles."
On their petition, recorded in the Office of the Commissioners on the 9th day of January, 1862.

78. To Louis Petre and Edward Samuel Tucker, of No. 194, Waterloo Road, London, for an invention of "The application of velvet, plush, cloth, leather, American cloth, oil cloth, and other such like substances alone and in combination with other materials for advertising show boards, show cards, window tickets, and all such uses."
On their petition, recorded in the Office of the Commissioners on the 10th day of January, 1862.

81. To Thomas Ramsay, of the town and county of Newcastle-upon-Tyne, Coal Owner, for the invention of "Improvements in the manufacture of coke."
On his petition, recorded in the Office of the Commissioners on the 11th day of January, 1862.

108. To Thomas Harrison, of Birmingham, Foreman on the Glebe Farm, and John George Harrison, of Kirby Ravensworth, Blacksmith, both in the North Riding of Yorkshire, for the invention of "Improvements in ploughs."
On their petition, recorded in the Office of the Commissioners on the 14th day of January, 1862.

113. To William Cleland, of 39, St. George's Hill, Everton, Liverpool, in the county of Lancaster, for the invention of "Improvements in treating and utilizing certain materials used and products obtained in the manufacture of gas, and in apparatus connected with the said treatment."
On his petition, recorded in the Office of the Commissioners on the 15th day of January, 1862.

123. To Thomas Myers, of 41, Bloomsbury Square, in the county of Middlesex, and Edward Myers, of 56, Millbank Street, Westminster, for the invention of "An improved composition for preventing rust on bright steel, iron, brass, or metal surfaces."

124. And to Robert Dunlop, of Cwm, Avon, Taibach, in the county of Glamorgan, Accountant, for the invention of "Improved means for facilitating calculations."
On both their petitions, recorded in the Office of the Commissioners on the 17th day of January, 1862.

141. To Léonard Barbat, of 2, Rue Sainte-Appoline, Paris, France, and of 4, South Street, Finsbury, London, for the invention of "A new and improved fabric applicable to the manufacture of hats, bonnets, and other like articles."
On his petition, recorded in the Office of the Commissioners on the 20th day of January, 1862.

169. To Joseph Hinks, of Birmingham, in the county of Warwick, Manufacturer, and Adam Dixon, also of Birmingham, in the county of Warwick, Engineer, for the invention of "A new apparatus for warming and drying boots, shoes, or slippers, which apparatus is also applicable for racking or storing boots, shoes, or slippers, for exhibition or otherwise."

170. To Jonathan Aldous Mays, of No. 30, Regent Square, in the parish of St. Pancras, in the county of Middlesex, for the invention of "Improvements in envelopes and other wrappers."

175. And to Henry Owen, of Albert Terrace, Islington, in the county of Middlesex, Manufacturer, for the invention of "Improvements in the manufacture of stockings and other articles of hosiery."
On their several petitions, recorded in the Office of the Commissioners on the 23rd day of January, 1862.

205. To Joseph Lillie, of Duke Street, Adelphi, in the county of Middlesex, Engineer, for the invention of "Improvements in the method of protecting ships' bottoms from fouling, and in materials to be used therefor."
On his petition, recorded in the Office of the Commissioners on the 27th day of January, 1862.

214. To Henry Hughes Treppass, of 14, St. George's Terrace, Barnsbury Park, in the county of Middlesex, for the invention of "Improvements in the construction, use, and employment of the kaleidescope."

226. And To William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in engines to be employed by pumping or forcing air or water, or for other purposes where a rectilinear motion is required."—A communication to him from abroad by Wellington Lee, of New York, in the United States of America, Engineer.
On both their petitions, recorded in the Office of the Commissioners on the 28th day of January, 1862.

231. To François Delamare de Boutteville, the younger, of Fontaine-le-Bourg, in the department of the Seine Inférieure, in the empire of France, for the invention of "Improvements in machinery applicable to the spinning of fibrous substances."

234. To Thomas Meriton, of No. 3, Leadenhall Street, in the city of London, and of Hamburg, Engineer, for the invention of "Improvements in marine and other boilers for generating steam."

239. To William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in printing machinery."—A communication to him from abroad by Richard March Hoe, of New York, in the United States of America.

241. And to GEORGE BEDSON, of Manchester, in the county of Lancaster, Manager, for the invention of "Improvements in wire fences."

On their several petitions, recorded in the Office of the Commissioners on the 29th day of January, 1862.

243. To GEORGE PHILLIPS, the elder, Chemist, and GEORGE PHILLIPS, the younger, Rectifier and Dealer in Spirits, both of 89, Holborn Hill, in the parish of St. Andrew, Holborn, in the city of London, for the invention of "Improvements in the distillation and rectification of alcohols or spirits."

244. To MATTHEW ALLEN, of No. 14, Worship Street, in the parish of St. Leonard, Shoreditch, in the county of Middlesex, Builder, for the invention of "Improvements in the construction of buildings for the prevention of fire, and in the materials to be employed therein and therefor."

245. To THEOPHILUS GONTARD, of No. 16, Rue des Vieux Augustins, Paris, in the empire of France, Physician, for the invention of "Improved truss plates producing an upward pressure."

247. And to JAMES FIRTH, of the firm of Edwin Firth and Sons, of Flush Mills, Heckmondwike, near Leeds, in the county of York, for the invention of "An improvement in finishing mohair cloth."

On their several petitions, recorded in the Office of the Commissioners on the 30th day of January, 1862.

253. To DAVID LITTLEHALES, Japanner, of Brearley Street West, Birmingham, in the county of Warwick, for the invention of "An improved plastic compound as a substitute for papier maché."

255. To JOHN SILVESTER, of the firm of George Salter and Co., of West Bromwich, in the county of Stafford, Manufacturers, for the invention of "Improvements in pocket and other spring balances."

256. To FRANCIS BAGGETT, of Birmingham, in the county of Warwick, Gun Maker, and JOHN SANGER, of Aston, near Birmingham aforesaid, Gun Maker, for the invention of "An improvement or improvements in breech-loading small arms."

258. To JOHN DODGE, of Little Portland Street, in the county of Middlesex, Carriage Builder, for the invention of "Improvements in C springs for carriages when used without a perch."

259. To WILLIAM WALTON, of Manchester, and FREDERICK WALTON, of the British Grove Works, Chiswick, for the invention of "Improvements in the manufacture of wire cards."

260. To GEORGE MEHRTENS, of 27½ Charles Street, Hampstead Road, in the county of Middlesex, for the invention of "Improvements in ladies' stays, and in the bodies of ladies' dresses."

261. To JOHN HARGREAVES, of No. 12, Clifton Cottages, Clifton Road, Peckham, in the county of Surrey, for the invention of "Improvements in the manufacture of pipes or tubes for conveying water, gas, acids, sewage, enclosing electric telegraph wires, and for other purposes, which improvements are also applicable to the manufacture of other vessels and articles, and in the machinery or apparatus connected therewith."

263. To CHARLES PONTIFEX, junior, of 55, Shoe Lane, in the city of London, Coppersmith and Engineer, for the invention of "Improvements in apparatus for cooling or heating fluids or liquids."

267. To ALEXANDER FORSYTH, of Glasgow, in the county of Lanark, North Britain, Agent, for the invention of "Improvements in the manufacture of frames and in tablets used for advertising purposes."

268. And to CHARLES VERONIQUE, of Rue Thaitbout, in the empire of France, Tailor, for the invention of "An improved wrapper garment."

On their several petitions, recorded in the Office of the Commissioners on the 31st day of January, 1862.

270. To LEON FAUVEL, of Paris, France, Manufacturer, for the invention of "Improvements in apparatus for indicating the existence of escapes in gas tubing, and for stopping the continuance thereof."

271. To ROBERT BURKHARDT and CARL DÖEBLER, of the city of Manchester, in the county of Lancaster, for the invention of "Improvements in æolian harps."

275. To FRIEDRICH WILHELM DAEHNE, of Swansea, Glamorganshire, for the invention of "Improvements in furnaces used in the manufacture of zinc."

276. To THOMAS COOK, of Coburg Road, Old Kent Road, in the county of Surrey, Machinist, for the invention of "Improvements in machinery for punching, cutting, and pressing metals and other materials."

277. To JOHN HARRIS, of Store Street, Tottenham Court Road, in the county of Middlesex, for the invention of "Improvements in mattresses, squabs, pillows, and other like articles of furniture."

278. To THOMAS COOK, of Coburg Road, Old Kent Road, in the county of Surrey, Machinist, for the invention of "Improvements in machinery for folding envelopes."

280. And to FRANCIS RIESBECK and WILLIAM BECKER, both of Aldermanbury, in the city of London, Manufacturers, for the invention of "Improvements in locks or fastenings for bags, portemonnaies, and other like articles having metal frames."

On their several petitions, recorded in the Office of the Commissioners on the 1st day of February, 1862.

282. To LAWRENCE HILL, of Port Glasgow, in the county of Renfrew, North Britain, Shipbuilder, for the invention of "Improvements in applying armour plating to war ships."

284. To CHARLES WILLIAM LANCASTER, of New Bond Street, in the county of Middlesex, Gun Maker, for the invention of "Improvements in strengthening cast iron ordnance."

286. To JAMES JOHN KING, of Chase Lodge, Lavender Hill, Wandsworth Road, in the county of Surrey, Cabinet Maker, for the invention of "Improvements in the fastenings of bedsteads, which fastenings are also applicable to other portable framework."

287. And to WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of

"Improvements in machinery for spinning."—A communication to him from abroad by Henri Schlumberger, of Guebwiller, in the empire of France.

On their several petitions, recorded in the Office of the Commissioners on the 3rd day of February, 1862.

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290. To GEORGE MANWARING, of Southampton, in the county of Hants, Engineer, for the invention of "Improvements in flushing apparatus for closets, sewers, and other water services."

293. To JAMES LEE NORTON, of No. 38, Belle Sauvage Yard, Ludgate Hill, in the city of London, for the invention of "Improvements in beating, stretching, and drying fabrics, and in the apparatus employed therein, part of which apparatus is also applicable for thrashing linseed."—The result partly of a communication to him from abroad by William Aldon, of 28, Boulevart Bonne-Nouvelle, Paris, in the empire of France, and partly of invention and discovery made by himself.

295. To JOHN GREENWOOD, of Portland Mills, Bradford, in the county of York, Worsted Spinner, for the invention of "Improvements in means or apparatus for preparing and combing wool and other fibres."

297. And to JAMES WEBSTER, of Birmingham, in the county of Warwick, Engineer, for the invention of "Improvements in gas fittings."

On their several petitions, recorded in the Office of the Commissioners on the 4th day of February, 1862.

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299. To DANIEL GALLAFENT, of 15, Stepney Causeway, in the county of Middlesex, Engineer, for the invention of "Certain improvements in the mode or modes of generating or producing elastic vapours to be used as a motive power."

300. To WILLIAM EDWARD TAYLOR, of Enfield, near Accrington, in the county of Lancaster, Cotton Spinner and Manufacturer, for the invention of "Certain improvements in carding engines."

301. To JOHN KING, of Chadshunt, in the county of Warwick, Farmer, for the invention of "Improvements in lubricators for lubricating the moving parts of machinery."

302. To EDWARD FISHER SMITH, of Dudley, in the county of Worcester, Agent, and THOMAS SWINNERTON, of Dudley aforesaid, Blast Furnace Manager, for the invention of "Improvements in the manufacture of coke, and in kilns or ovens for the manufacture of coke."

303. To JOHN BROWNING, of the Minories, in the city of London, Optician, for the invention of "Improvements in aneroid barometers."

304. To HENRY ASHWORTH, of Littleborough, in the county of Lancaster, Manufacturer, for the invention of "Certain improvements in machinery or apparatus employed in spinning cotton and other fibrous substances."

305. To EDWARD HARRISON, of Oldham, in the county of Lancaster, Schoolmaster, for the invention of "A certain compound or certain compounds to be used as a substitute for gunpowder."

307. To JESSE LEE, of Church Gate, in the borough of Leicester, Engineer, for the invention of "Improvements in traction engines."

308. To JOHN BELLAMY PAYNE, of Chard, in the county of Somerset, Engineer and Lace Manufacturer, for the invention of "Improvements in the treatment or preparation of hemp, flax, and other analogous fibrous substances for spinning."

309. And to ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the invention of "An improvement in fire arms."—A communication to him from abroad by Caleb Hannum Bradley and Gideon Miles, of West Chester, Pennsylvania, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 5th day of February, 1862.

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310. To CHARLES CALOW, of Newton Heath, near Manchester, in the county of Lancaster, Pattern Maker, and JOHN WILLIAM HIRST, of the city of Manchester aforesaid, Machinist, for the invention of "Improvements in slide valves for steam-engines and other similar purposes."

312. To JAMES PITKIN, of Clerkenwell, in the county of Middlesex, Philosophical Instrument Maker, for the invention of "An improvement in aneroid barometers."

314. To ROBERT SHORTREDE, of Brighton, in the county of Sussex, Colonel in Her Majesty's Indian Army, for the invention of "Improvements in the construction of ships of war with armour plates."

316. To MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in obtaining and applying motive power, and raising and forcing fluids, and in apparatus employed therein."—A communication to him from abroad by Louis Coignard, of 33, Boulevart Saint Martin, Paris, France.

318. To EDWARD TAYLOR BELLHOUSE, of Manchester, in the county of Lancaster, Engineer, and WILLIAM JOHN DORNING, of the same place, Engineer, for the invention of "Improvements in the construction of hydrostatic presses suitable for packing and compressing cotton and other materials."

320. And to JOHN TONKIN, the younger, of Pool, in the parish of Illogan, in the county of Cornwall, for the invention of "Improvements in the manufacture of gunpowder."

On their several petitions, recorded in the Office of the Commissioners on the 6th day of February, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given that the petition of

357. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of No. 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, praying for Letters Patent for the invention of "Improvements in smoothing irons,"—a communication to him from abroad by Charles Jean Baptiste Eugène Caillone, of Paris, in the empire of France,—was deposited and recorded in the Office of the Commissioners on the 11th day of February, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Prolongation of Patent—Notice of Hearing.

In the Judicial Committee of the Privy Council.

In the matter of the petition of Richard Christopher Mansell, formerly of Grange Road, in the county of Surrey, Gentleman, but now of Ashford, in the county of Kent, Gentleman, for a prolongation of the term of the Letters Patent granted to the said Richard Christopher Mansell, for "Certain improvements in the construction of vehicles used on railways or on common roads," and bearing date the 1st day of June, 1848, for England, Wales, Berwick-upon-Tweed, the islands of Guernsey, Jersey, Alderney, Sark, and Man, and all colonies and plantations abroad.

Notice is hereby given, that the Judicial Committee of Her Majesty's Privy Council did, on the 3rd day of February instant, appoint Monday, the 24th day of March, 1862, for hearing the matter of the said petition.—Dated this 6th day of February, 1862.

Clarke, Gray, and Woodcock,
No. 20, Lincoln's Inn Fields,
Agents for
Beale and Marigold,
Birmingham, and No. 10, Park Street, Westminster,
Solicitors for the Petitioner.

Prolongation of Patent—Notice of Application.

Notice is hereby given, that Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, Samuel Bentz, of Hood's Mills, Carrol county, state of Maryland, United States of America, Agriculturist, Abraham Hart, of the city of Philadelphia, in the state of Pennsylvania, in the said United States, Gentleman, and James E. Brown, of Philadelphia aforesaid, Chemist, but at present residing at Lime Tree Cottage, Charleford Road, Putney, in the county of Surrey, intend to apply by petition under the 4th section of the Statute 5th and 6th William IV., chapter 83, and the 7th and 8th Victoria, chapter 69, to Her Majesty in Council, for a prolongation of the term of sole using and vending an invention of "Certain improvements in dressing or cleansing grain, and in separating extraneous matters therefrom," granted to the said Alfred Vincent Newton, by Letters Patent bearing date the 22nd day of August, in the 12th year of the reign of Her present Majesty Queen Victoria. And notice is hereby further given, that the said Alfred Vincent Newton, Samuel Bentz, Abraham Hart, and James E. Brown intend to apply, by counsel, to the Judicial Committee of the Privy Council, on the 20th day of March now next; or if the said Judicial Committee shall not sit on that day, at the then next sitting of the said Judicial Committee for a time to be fixed for hearing the matter of their said petition, and that on or before the said 20th day of March next, notice must be given of any opposition intended to be made to the said petition; and any person intending to oppose the said application must lodge a caveat against the granting of such application at the Council Office on or before that day.—Dated this 10th day of February, 1862.

Bower, Son, and Cotton,
46, Chancery Lane,
Solicitors for the above-named
Alfred Vincent Newton, Samuel Bentz,
Abraham Hart, and James E. Brown.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

14th February, 1862.

2058. William Henry Smith, formerly of Philadelphia, in the United States of America, but now of London, in the county of Middlesex, M.D., for an invention of "Improvements in the preparation application, and manufacture of peat."—Dated 19th August, 1861.

2060. William Firth, of Burley, in the borough of Leeds, in the county of York, Merchant, for an invention of "Improvements in machinery for digging or turning up soil, mowing, reaping, and other agricultural purposes."—Dated 19th August, 1861.

2061. Thomas Pedrick, of 5, Park Place, Brixton, in the county of Surrey, Machinist, for an invention of "Improvements in obtaining and applying water motive power."—Dated 19th August, 1861.

2064. Augustin Sylvester Rostaing, Native of France, but now residing at Dresden, in the Kingdom of Saxony, for an invention of "Improvements in the construction of spectacles."—Dated 20th August, 1861.

2066. Hannah Emes, of Adelaide Road, Haverstock Hill, in the county of Middlesex, for an invention of "Improvements in dress fastenings, which are also applicable to other purposes."—Dated 20th August, 1861.

2069. Samuel Whitaker, of Haverstock Hill, in the county of Middlesex, Electrician, and Ralph Augustine Jones, of Aylesbury, in the county of Buckingham, Railway Superintendent, for an invention of "Improvements in operating upon railway signals, and in indicating their position by means of electricity."—Dated 20th August, 1861.

2092. Thomas Grahame, of Worthing, in the county of Sussex, for an invention of "Improvements in the construction of boats, rafts, and other floating structures."—Dated 21st August, 1861.

2107. Augustus Bryant Childs, of New Oxford Street, London, Middlesex, for an invention of "Improvements in means to be employed in the dressing or cracking of millstones."—The said invention has been communicated to him from abroad by David Monroe Childs, of Rochester, New York, United States of America.—Dated 23rd August, 1861.

2132. Emile Peltier, of Paris, France, Manufacturer, for an invention of "Improvements in the manufacture of metallic boxes, and in machinery employed therein."—Dated 27th August, 1861.

2162. James Simmons Matthews, of Moore Cottage, Bowling Green Street, Kennington Park, in the county of Surrey, for an invention of "Improvements in the manufacture and preparation of starch, and in the apparatus employed therein."—Dated 30th August, 1861.

2169. William Hensman, of Woburn, in the county of Bedfordshire, and William Hensman, the younger, of Linslade, in the county of Buckinghamshire, Agricultural Engineers, for an invention of "Improvements in apparatus for tilling land by steam power."—Dated 31st August, 1861.

2201. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in self-acting brakes applicable to railway or locomotive engines and carriages."—A communication to him from abroad by Léon Isidore Molinos, of No. 45, Rue St. Sébastien, Paris, Engineer.—Dated 4th September, 1861.

2261. John Bowns, of the Viaduct Works, Earlstown, Warrington Junction, in the county of Lancaster, for an invention of "Improvements in railway wheels and railway brakes."—Dated 11th September, 1861.

2267. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "An improved combination of machinery for the production of Valenciennes, Chantilly, Brussels, and other similar laces."—A communication to him from Jean François Régis Laporte, a person resident at No. 3, Rue St. Fiacre, Paris.—Dated 12th September, 1861.

2453. Andrew Wyley, of Allsop's Place, Regent's Park, in the conuty of Middlesex, Geological Surveyor, for an invention of "Improvements in fire-arms."—Dated 2nd October, 1861.

2607. James Webster, of Birmingham, in the county of Warwick, Engineer, for an invention of "Improvements in manufacturing oxygen gas and obtaining certain other products."—Dated 19th October, 1861.

2665. John McCall, of Hounsditch, in the city of London, Provision Merchant, and Bevan George Sloper, of Walthamstow, in the county of Essex, Chemist, for an invention of "An improvement in the preservation of articles of food."—Dated 24th October, 1861.

2725. William Cook, of Beaufort Villas, Brixton, in the county of Surrey, Gentleman, and Henry Cook, of Manchester, in the county of Lancaster, Gentleman, for an invention of "Improvements in printing telegaphs."—Dated 30th October, 1861.

2900. George Parry, of Ebbw Vale Iron Works, in the county of Monmouth, Furnace Manager, for an invention of "Improvements in the manufacture of iron and steel."—Dated 18th November, 1861.

3031. George Tomlinson Bousfield, of the Loughborough Park, Brixton, in the county of Surrey, for an invention of "An improved stopper for bottles, decanters, jars, and similar articles."—A communication to him from abroad by the inventor William Augustus Shaw, residing at Boston, in the United States of America.—Dated 3rd December, 1861.

3124. William Bell, of the firm of Sidney Flavel and Company, of Leamington, in the county of Warwick, Manufacturers, for an invention of "Improvements in kitcheners or cooking ranges."—Dated 13th December, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 11th February*, 1862, *inclusive.*)

10th February.

401. George Betjemann, George William Betjemann, and John Betjemann, all of Upper Ashby Street, in the county of Middlesex, Desk and Dressing Case Makers, for an invention of "Improvements in book slides."—Dated 12th February, 1859.

11th February.

404. Henry Gardner, of 1, Old Quebec Street Portman Square, in the county of Middlesex, for an invention of "Improvements in machinery for breaking and preparing flax and other fibres."—Dated 12th February, 1859.

412. Josiah Latimer Clark, of Haverstock Hill, in the county of Middlesex, for an invention of "Improvements in the means of working railway signals and switches."—Dated 14th February, 1859.

435. John James Russell, of Wednesbury, in the county of Stafford, for an invention of "Improvements in machinery used for heating and welding the edges of the plates used in the manufacture of cylinders and other articles."—Dated 16th February, 1859.

439. Joseph Breeden, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "New or improved machinery for the manufacture of taps or stopcocks and fittings for gas, steam, and water pipes."—Dated 16th February, 1859.

451. Charles Garton, of the city and county of Bristol, Brewer, for an invention of "An improved method of treating cane sugar in order to render it fitter to be employed in brewing, distilling, and wine and vinegar making."—Dated 18th February, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

11th February, 1862.

355. Samuel Barlow Wright, of Parkfields, Stone, Staffordshire, and Henry Thomas Green, of Moreton, Staffordshire, for an invention of "Improvements in the manufacture of encaustic tiles."—Dated 16th February, 1855.

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THE

COMMISSIONERS OF PATENTS' JOURNAL.

By Authority.

(Registered for transmission abroad.)

No. 848. TUESDAY, FEBRUARY 18, 1862. Price 2d.

Applications for Letters Patent.

(*14th, 15th, and 17th February*, 1862.)

96. Samuel Benjamin Whitfield, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in the manufacture of iron bedsteads, and in the manufacture of ornamental iron tubes or columns for the construction and ornamentation of iron bedsteads."—Dated 14th February, 1862.

397. Arthur John Dodson, of Clapham, in the county of Surrey, Civil Engineer, for an invention of "An improved composition for coating, covering, or protecting ships' bottoms, applicable also for coating or covering railway sleepers, telegraphic wires, and other surfaces, and likewise as a cement and as a substitute for metal for certain constructive purposes." — Dated 14th February, 1862.

398. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in mounting and fixing the handles or knobs of doors, furniture, and other articles."—A communication to him from abroad by Mr. Félix Hilaire Gallimard, of 29, Boulevart St. Martin, Paris, Commission Agent.—Dated 14th February, 1862.

399. Thomas Duncan McFarlane, of Glasgow, in the county of Lanark, North Britain, Machinist, for an invention of "Improvements in sewing machines."—Dated 14th February, 1862.

400. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for propelling ships and boats."—A communication to him from abroad by Charles Arnaud and Joseph Labriola, of Paris, in the empire of France.—Dated 14th February, 1862.

401. William Ford Smith and Arthur Coventry, of Gresley Iron Works, Ordsal Lane, Salford, in the county of Lancaster, Engineers and Machinists, for an invention of "Improvements in, and applicable to, lathes for turning and cutting screws."—Dated 14th February, 1862.

402. Henry Colwell, of No. 14, Davies Street, in the parish of Saint George, Hanover Square, in the county of Middlesex, Truss Maker, for an invention of "An improved truss for hernia, prolapsus uteri, and prolapsus ani." — Dated 15th February, 1862.

403. Thomas Renison, of Glasgow, in the county of Lanark, North Britain, Plumber, for an invention of "Improvements in water closets."—Dated 15th February, 1862.

404. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in time-keepers."—A communication to him from abroad by John Henry Koosen, of Dresden, in the kingdom of Saxony. —Dated 15th February, 1862.

405. William Avery, of the firm of James and Sons, of Birmingham, in the county of Warwick, Screw Manufacturers, for an invention of "Improvements in machinery for the manufacture of screws, a part or parts of which improvements may also be used in the manufacture of pins, rivets, and nails."—Dated 15th February, 1862.

406. George Henry Law, of 17, Rochester Road, Camden New Town, in the county of Middlesex, Gentleman, for an invention of "Improvements in the construction of steam and other boilers."—Dated 15th February, 1862.

407. Joseph Wall, of Liverpool, in the county of Lancaster, Plumber, and Thomas Dodd, also of Liverpool, aforesaid, Glass Merchant, for an invention of "Improvements in the construction and arrangement of apparatus for regulating the

flow or passage of fluids."—Dated 15th February, 1862.

408. Cornelius Turner, of the Airedale Woollen Felt Mills, Leeds, in the county of York, Manufacturer, and Jack Shaw, of the same place, Manager, for an invention of "Improvements in felted fabrics."—Dated 15th February, 1862.

409. Thomas Horsley, of 10, Coney Street, York, for an invention of "Improvements in apparatus for turning and closing the cartridges of breech-loading fire-arms."—Dated 15th February, 1862.

410. John Cooke, of Willington, in the county of Durham, Mining Engineer, for an invention of "Improvements in marine propulsion."—Dated 15th February, 1862.

411. David Dunne Kyle, of Victoria Street, Westminster, for an invention of "An improved method of communicating or signalling in and with railways trains."—Dated 15th February, 1862.

412. Richard Bunting, of Sheffield, in the county of York, Spring Knife Manufacturer, for an invention of "Improvements in the manufacture of bolsters and seales, and in machinery employed therein."—Dated 15th February, 1862.

413. John Chatterton, of Highbury, in the county of Middlesex, Engineer, and Willoughby Smith, of Dalston, in the same county, Electrician, for an invention of "Improvements in telegraph cables,"—Dated 15th February, 1862.

414. Robert Bell, of Westland 41, Row, Dublin, Esquire, for an invention of "Improvements in treating fabrics or articles composed of animal and vegetable substances for the purpose of separating one class from another."—Dated 15th February, 1862.

415. Arthur Henry Harrison, of 16, Park Place, Highbury, in the county of Middlesex, for an invention of "An improved under-garment for gentlemen and ladies' wear."—Dated 15th February, 1862.

416. John Green, of Newtown, in the parish of Saint Martin, in the county of Worcester, Farmer, for an invention of "Improvements in the method of and apparatus for signalling, which improvements apply to signals used with steam ploughs or cultivators."—Dated 15th February, 1862.

417. Jonathan Russell, of Westbury Villa, Camberwell, in the county of Surrey, Master Mariner, for an invention of "Improvements in the method of raising sunken, submerged, or stranded vessels."—Dated 15th February, 1862.

418. Francis William Gerish, of East Road, City Road, in the county of Middlesex, Engineer, for an invention of "Improvements in pumps."—Dated 17th February, 1862.

419. Hugh Crawford, James Crawford, Robert Crawford, and Robert Templeton, all of Beith, in the county of Ayr, North Britain, for an invention of "Improvements in looms for weaving."—Dated 17th February, 1862.

420. John Hodgkinson, Cotton Spinner, and Daniel Greenhalgh, Manager, both of Bolton, in the county of Lancaster, for an invention of "Improvements in machinery or apparatus for preparing or combing cotton, wool, and other fibrous materials."—Dated 17th February, 1862.

421. John Whitaker, of Leigh, in the county of Lancaster, Agricultural Implement Maker, for an invention of "Improvements in machinery or apparatus for pulping roots."—Dated 17th February, 1862.

422. James John Van den Berg, of the Hague, in the kingdom of the Netherlands, Manufacturer, for an invention of "An economical fire kindler."—Dated 17th February, 1862.

423. Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention of "An improved method of, and apparatus, for collecting the gases given off from furnaces."—A communication to him from abroad by Emil Langen, of Sieburg, in the kingdom of Prussia, Engineer.—Dated 17th February, 1862.

424. Thomas Birdsall, of Leeds, in the county of York, Chemist, and James Birdsall, of the same place, Tanner, for an invention of "Improvements in preparing hides or skins for tanning."—Dated 17th February, 1862.

425. James Combe, of Belfast, for an invention of "Improvements in machinery for winding cops, and in the treatment of cops for warps and other purposes."—Dated 17th February, 1862.

Notices to Proceed.

Notice is hereby given, that

2488. John Edwards, of 77, Aldermanbury, in the city of London, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in the manufacture of buttons."

As set forth in his petition, recorded in the said office on the 5th day of October, 1861.

2505. And John Chaplin Willsher, of Petches, in the parish of Finchingfield, in the county of Essex, Farmer, has given the like notice in respect of the invention of "Improvements in the construction of combined thrashing and dressing machines."

As set forth in his petition, recorded in the said office on the 7th day of October, 1861.

2507. And WILLIAM CATFORD, of Chard, in the county of Somerset, Machinist, and JOHN SHERWOOD WHEATLEY, of Nottingham, in the county of Nottingham, Lace Manufacturer, have given the like notice in respect of the invention of "Improvements in the manufacture of bobbin, net, or twist lace."

2510. And WILLIAM SIMPSON, of Calais, in the empire of France, Lace Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of twist lace made in twist lace machines."

2512. And ISAAC EVANS, junr., Collier, of Cefn Mawr, Ruabon, in the county of Denbighshire, North Wales, has given the like notice in respect of the invention of "An improved miners' lamp."

As set forth in their respective petitions, all recorded in the said office on the 8th day of October, 1861.

2514. And ROBERT WILLIAM SIEVIER, of Guildford Street, Russell Square, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in batteries for the purposes of war."

2516. And WILLIAM SMITH, of 21, King Street, West Smithfield, in the county of Middlesex, Gas Meter Manufacturer, has given the like notice in respect of the invention of "Improvements in apparatus for measuring and regulating the pressure of gas."

2525. And THOMAS TIDMARSH, of Dorking, county of Surrey, Agriculturist, has given the like notice in respect of the invention of "An improved artificial manure."

As set forth in their respective petitions, all recorded in the said office on the 9th day of October, 1861.

2530. And WILLIAM MOULD and JOHN HALL, of Belmont, near Bolton, and SAMUEL COOK and WILLIAM HENRY HACKING, of Bury, all in the county of Lancaster, have given the like notice in respect of the invention of "Improvements in machinery for manufacturing healds or harness used in looms for weaving."

2532. And JAMES STEVENS, Wholesale Haberdasher and Fancy Trimming Warehouseman, of Birmingham, in the county of Warwick, has given the like notice in respect of the invention of "Certain improvements in connectors and adjusters for connecting and adjusting crinolines."

2534. And BENJAMIN BROWNE, of No. 52, King William Street, in the city of London, Civil Engineer and Patent Agent, has given the like notice in respect of the invention of "A new improved spring."—A communication to him from abroad by Perry Green Gardiner, of New York city, in the county and state of New York, in the United States of America.

As set forth in their respective petitions, all recorded in the said office on the 10th day of October, 1861.

2541. And ROBERT RICHARDSON, of No. 26, Great George Street, Westminster, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of railway fastenings, and a mode of preparing rails and fish plates to receive them."

2544. And NUMA STRAM, of 12, Ashby Street, Northampton Square, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in watches."

As set forth in their respective petitions, both recorded in the said office on the 11th day of October, 1861.

2545. And JOHN CLARK, of Glasgow, in the county of Lanark, North Britain, Machinist, has given the like notice in respect of the invention of "Improvements in electric-telegraph apparatus."

2552. And HENRY NELSON, of the city of Manchester, in the county of Lancaster, Machine Maker, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for punching washers for throstles and other similar purposes."

As set forth in their respective petitions, both recorded in the said office on the 12th day of October, 1861.

2559. And HENRY JOHN DISTIN, of No. 9, Great Newport Street, Leicester Square, in the county of Middlesex, Musical Instrument Manufacturer, has given the like notice in respect of the invention of "Improvements in metal musical wind instruments."

2561. And BENJAMIN TAYLOR, of Birmingham, in the county of Warwick, and CHARLES EDKINS, of the same place, Manufacturers, have given the like notice in respect of the invention of "Improvements in porterobes, or dress-suspenders, and also in apparatus for the suspension of curtains, draperies, and other articles."

2562. And FREDERICK BURNETT HOUGHTON, of 6, Clarendon Terrace, Kensington, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in apparatus employed in reducing straw and other vegetable substances in the manufacture of pulp for making paper."

As set forth in their respective petitions, all recorded in the said office on the 14th day of October, 1861.

2565. And CORNEILLE WYNANTS, of Saint Josse-ten-Noode, in the kingdom of Belgium, Engine Builder, has given the like notice in respect of the invention of "An improved chase for printing presses."

2567. And WILLIAM ROSS, of Glasgow, in the county of Lanark, North Britain, Brassfounder, has given the like notice in respect of the invention of "Improvements in constructing taps or valves."

As set forth in their respective petitions, both recorded in the said office on the 15th day of October, 1861.

2572. And RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "An improvement in plates for the table."—A communication to him from abroad by Victor Antoine Marcelin, of Paris, France.

2574. And THOMAS FORSTER, of Sparrow Hall, Streatham, in the county of Surrey, India Rubber Manufacturer, has given the like notice in respect of the invention of "Improvements in reworking waste vulcanised india rubber."

2579. And Joseph Lister, Engineer, and David Myers, Builder, both of Caledonian Street, Bradford, in the county of York, have given the like notice in respect of the invention of "Improvements in lifting or hoisting apparatus, whereby to insure the safety of the cage or article lifted when a rope or chain breaks or is overwound, and in hoists generally, as applied to mills, warehouses, and other buildings."

As set forth in their respective petitions, all recorded in the said office on the 16th day of October, 1861.

2584. And William Welch, of 27, King Street, Southsea, Portsmouth, in the county of Hants, has given the like notice in respect of the invention of "Improvements in marine screw propellers."

As set forth in his petition, recorded in the said office on the 17th day of October, 1861.

2610. And Théophile Lepeinteur, of Paris, in the empire of France, Glove Manufacturer, has given the like notice in respect of the invention of "Improvements in fastening for gloves, belts, and other articles."

2611. And Thomas Fearnley, of Areadia Street, Manningham, near Bradford, in the county of York, Engineer, has given the like notice in respect of the invention of "Improvements in steam hammers."

As set forth in their respective petitions, both recorded in the said office on the 19th day of October, 1861.

2621. And Colin McDougall, of the city of Manchester, in the county of Lancaster, Wholesale Warehouseman, has given the like notice in respect of the invention of "Improvements in connecting and fastening the bands of covered steel or other materials used for crinolines."

2625. And Francis Alton Calvert, of the city of Manchester, Engineer, has given the like notice in respect of the invention of "Improvements in engines to be propelled by compressed atmospheric air or steam."

2626. And Joseph Scott Phillips, Major H.M.'s I. R. List, of No. 10, College Crescent, Finchley Road, London, N.W., has given the like notice in respect of the invention of "A new method and apparatus for the propulsion of vessels through the water."

As set forth in their respective petitions, all recorded in the said office on the 21st day of October, 1861.

2666. And Robert Andrew Boyd, of Southwark, in the county of Surrey, Merchant, has given the like notice in respect of the invention of "Improvements in apparatuses for singeing pigs."

As set forth in his petition, recorded in the said office on the 24th day of October, 1861.

2700. And George Mowbray Gilbert of 1, Albany Terrace, Britannia Square, Worcester, has given the like notice in respect of the invention of "Improvements in preparing blue colour, and in apparatus for applying such colour to water."

As set forth in his petition, recorded in the said office on the 28th day of October, 1861.

2877. And Edward Loomes, of Whittlesey, in the isle of Ely, and county of Cambridge, Brick and Tile Manufacturer, has given the like notice in respect of the invention of "Improved machinery for moulding bricks, tiles, and other like articles."

As set forth in his petition, recorded in the said office on the 15th day of November, 1861.

3146. And William Rodrigues Rogers, of Gray's Inn Road, in the county of Middlesex, Builder, has given the like notice in respect of the invention of "An improved mode of constructing dovetail joints."

As set forth in his petition, recorded in the said office on the 14th day of December, 1861.

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61. And John Brunt, of No. 15, Rue Petrelle, in the city of Paris, Engineer, has given the like notice in respect of the invention of "Improvements in gas meters."

As set forth in his petition, recorded in the said office on the 9th day of January, 1862.

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191. And John Alison, of Brightlands, Reigate, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in apparatus for tilling land by steam power."

As set forth in his petition, recorded in the said office on the 24th day of January, 1862.

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207. And Ralph Martindale, of Handsworth, in the county of Stafford, Gentleman, has given the like notice in respect of the invention of "Improvements in globes and glasses to be used with hydrocarbon lamps."

As set forth in his petition, recorded in the said office on the 27th day of January, 1862.

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234. And Thomas Meriton, of No. 3, Leadenhall Street, in the city of London, and of Hamburgh, Engineer, has given the like notice in respect of the invention of "Improvements in marine and other boilers for generating steam."

As set forth in his petition, recorded in the said office on the 29th day of January, 1862.

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243. And George Phillips the elder, Chemist, and George Phillips, the younger, Rectifier, and Dealer in Spirits, both of 89, Holborn Hill, in the parish of Saint Andrew, Holborn, in the city of London, have given the like notice in respect of the invention of "Improvements in the distillation and rectification of alcohols or spirits."

As set forth in their petition, recorded in the said office on the 30th day of January, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

18th February, 1862.

2057. Edmund Small Cathels, of Shrewsbury, in the county of Shropshire, Gas Engineer, for an invention of "Improvements in compensating gas meters."—Dated 19th August, 1861.

2067. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "An improvement in preserving meat and other animal substances."—A communication to him from abroad by Jean Pierre Liès-Bodard, of Strasbourg, France.—Dated 20th August, 1861.

2071. John Somerville, of Maidstone, in the county of Kent, Gas Engineer, for an invention of "Improvements in apparatus for drilling and tapping gas and water mains and pipes, and in preventing leakage therefrom." — Dated 20th August, 1861.

2075. Frederick Gye, of the Royal Italian Opera, Covent Garden, for an invention of "Improvements in constructing gasometers and gasometer tanks."—Dated 20th August, 1861.

2086. Nahum Salamon, of No. 8, Ludgate Street, in the city of London, Machine Factor, for an invention of "Attachments or apparatus for sewing machines."—A communication to him from abroad by Amasa B. Howe, of New York.—Dated 21st August, 1861.

2089. Joseph Marie Murat, of 51, Rue de Malte, Paris, in the empire of France, for an invention of "Improvements in machinery or apparatus for shearing military hat tufts and other similar articles."—Dated 21st August, 1861.

2096. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the preparation of pulp for paper."—A communication to him from abroad by Mademoiselle Jeanne Françoise-Marie de Cassan and Monsieur Jean Baptiste Meyer, both of Paris, in the empire of France.—Dated 22nd August, 1861.

2100. Louis Marino Casella, of Hatton Garden, in the county of Middlesex, Optician, for an invention of "Improvements in mercurial thermometers."—Dated 22nd August, 1861.

2108. Samuel Elson, of Oldham, in the county of Lancaster, Engineer, for an invention of "Improvements in apparatus for heating the feed water of steam boilers, superheating steam, and surface condensation."—Dated 23rd August, 1861.

2114. Michael Hyams, of 55, Bath Street, City Road, in the county of Middlesex, for an invention of "Improvement, in the manufacture of smoking pipes and cigar tubes, and preparing, washing, coating, covering, or otherwise impregnating them with aromatic substances in a solid, liquid, or aeriform state."—Dated 24th August, 1861.

2120. Robert Watkin Jones, of Glenbrook Baths and Hotel, in the county of Cork, for an invention of "Improvements in heating and ventilating, especially applicable to Turkish baths."—Dated 26th August, 1861.

2159. Alexandre Jaille, of Agen, in the department of the Lot et Garonne, in the empire of France, Merchant, for an invention of "An improved manufacture of manure."—Dated 30th August, 1861.

2168. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in shirts and chemises."—A communication to him from abroad by Madame Sénécal, formerly Marguerite Edile Guébin, of 29, Boulevart St. Martin, Paris.—Dated 30th August, 1861.

2185. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in signal apparatus applicable for the prevention of railway train collisions."—A communication to him from abroad by Mr. Antoine Grivel, junior, of 29, Boulevart St. Martin, Paris, Civil Engineer.—Dated 2nd September, 1861.

2223. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in ribbon looms."—A communication from Messrs. Benoit Durand and Claude Crozet, persons resident at No. 11, Rue de la Bourse, St. Etienne (Loire). — Dated 6th September, 1861.

2224. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in the application of the Archimedean screw to the production and transmission of motive power, and in the apparatus connected therewith."—A communication from Julius Sturm (C. E.) a person resident at Mannheim, in the grand duchy of Baden.—Dated 6th September, 1861.

2234. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatus for signalling on railways by means of electricity."—A communication to him from abroad by Eugene Vincenzi, of Parma, in Italy, Lieutenant of Artillery.—Dated 6th September, 1861.

2258. Leon Pierre Barré, of Paris, France, and of 4, South Street, Finsbury, London, Gentleman, for an invention of "Improvements in tubular steam boilers."—Dated 11th September, 1861.

2954. George Lowry, of Salford, in the county of Lancaster, Machinist, for an invention of "Certain improvements in machinery for carding and hackling flax, tow, and other fibrous substances."—Dated 25th November, 1861.

2961. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "An improved method of removing and preventing the formation of calcareous and saline deposits in steam boilers."—A communication to him from abroad by Lewis Baird, of Cambridge, Massachusetts, in the United States of America.—Dated 25th November, 1861.

3005. Jules D'Adhémar de Labaume, of 9, Dorset Terrace, Clapham Road, in the county of Surrey, for an invention of "Improvements in machinery for cooling and freezing water and other fluids."—A communication to him from abroad by Edouard Blée, resident at 3, Rue d'Amboise, Paris, in the empire of France."—Dated 28th November, 1861.

2043. William Henry Balmain, of Saint Helen's, in the county of Lancaster, Manufacturing Chemist, for an invention of "Improvements in the manufacture of potash and salts of potash."—Dated 4th December, 1861.

3047. Allen Thomas Carr, of Carlisle Street, Soho, in the county of Middlesex, Gentleman, for an invention of "The addition to horses' shoes of certain material to prevent slipping."—Dated 5th December, 1861.

3098. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in knapsacks."—A communication to him from abroad by Joseph Short, of the city of Boston, in the United States of America.—Dated 10th December, 1861.

3153. George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improvements in the manufacture of textile materials."—A communication to him from abroad by Alois Chevalier Auer de Welsbach, Aulic Councillor and Director of the Imperial Printing Office, Vienna.—Dated 16th December, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 15th February*, 1862, *inclusive.*)

13th February.

505. Jean Henri Guillaume Daniel Wagner, of Paris, in the empire of France, Manufacturer, for an invention of "Apparatus for cleaning water and removing all matters in suspension and dissolution contained in it, water intended to feed generators of all sorts (applicable also to other purposes), which besides previous to its getting into the generators is heated to the highest degree without almost any expense."—Dated 24th February, 1859.

14th February.

408. James Parkinson, of Manchester, in the county of Lancaster, Dentist, for an invention of "Certain improvements in coffins."—Dated 14th February, 1859.

427. Richard Cookson, of Layton Hawes, near Blackpool, in the county of Lancaster, Gentleman, and Charles William Homer, at Castle Hill, near Northwich, in the county of Chester, Civil Engineer, for an invention of "Improvements in machinery for making bricks, tiles, tubes and other articles of plastic materials, and in the mode of jointing drain pipes."—Dated 16th February, 1859.

468. George Paul, of Glasgow, in the county of Lanark, North Britain, Mechanic, for an invention of "Improvements in spindles and flyers."—Dated 21st February, 1859.

15th February.

440. John Eason, of Oxford Street, in the county of Middlesex, for an invention of "Improvements in apparatus applicable to tanning, dyeing, and obtaining extracts from vegetable, animal, and mineral substances."—Dated 16th February, 1859.

445. Pierre Edouard Fraissinet, of Paris, in the empire of France, Civil Engineer, for an invention of "A new or improved structure of iron applicable for paving, flooring, bridges, gratings, girders, and other like purposes."—Dated 17th February, 1859.

446. Thomas Cattell, of 30, Euston Square, in the county of Middlesex, M.D., for an invention of "Improvements in treating and purifying gutta-percha."—Dated 17th February, 1859.

FOREIGN and COLONIAL PATENT LAWS and RULES, being translations or copies of Official Communications, may be found in the following Numbers of this Journal, published at 2*d.* each, or 3*d.* free by post:—

Austria, No. 291.
Bavaria, No. 262.
Belgium, Nos. 292 and 348.
Baden, and Petty States of Germany, No. 325.
British Guiana, No. 798.
Canada, Nos. 279 and 625.
Cape of Good Hope, No. 727.
Ceylon, No. 648.
Cuba, No. 498.
Dutch West Indies, No. 322.
France, No. 228.
Greece, No. 325.
Germany, No. 435.
Hanover, No. 231.
India, Nos. 240, 348, and 552.
Jamaica, No. 660.
Mexico, No. 496.
Netherlands, No. 289.
New South Wales, No. 386.
Norway, No. 665.
Prussia, Nos. 313 and 329.
Parma, Piacenza, and Guastalla, No. 321.
Portugal, No. 325.
Poland, No. 335.
Roman States, No. 319.
Russia, Nos. 334 and 508.
Sardinia, Nos. 233, 235, 636, 637, 639, and 640.
Saxony, No. 236.
Sicilies (the Two), No. 316.
Spain, No. 323.
Sweden, Nos. 327 and 354.
United States of America, Nos. 638, 646, and 789.
Victoria, Nos. 186 and 359.
Wurtemberg, No. 314.

FOREIGN PATENTS.



AUSTRIA.*

List of Patents which were Delivered, Prolonged, and became Void during the month of December, 1861.†

(*Communicated by the Austrian Government.*)

1. Patents delivered.

517. Abraham Ganz, of Ofen, for "Improvements in railway crossings."—1 year.—(Secret.)—Dated 2nd December, 1861.

518. Andr. Hoschek, of Vienna, for "Tubes of smoking pipes with water reservoirs."—1 year.—(Secret.)—Dated 2nd December, 1861.

519. Adalbert Drbal, of Wiener-Neustadt, for "A plough, called 'Soil cutter.'"—1 year.—(Public.)—Dated 2nd December, 1861.

520. Anton Luckner, of Vienna, for "Improvements in safes free from rust."—1 year.—(Public.)—Dated 2nd December, 1861.

521. Thomas Agudio, of Turin, represented by Ed. A. Paget, Vienna, for "A funicular locomotor for ascending gradients on railways."—1 year.—(Public.)—Dated 2nd December, 1861.

522. Thomas Fewster Wilkinson, of Pest, for "Improvements in thrashing machines."—1 year.—(Public.)—Dated 2nd December, 1861.

523. Cornides and Comp., of Vienna, for "A machine for drawing wire without using spools."—3 years.—(Public.)—Dated 2nd December, 1861.

524. Ferdin. Voigt, of Dresden, represented by F. Gerhardy, of Bodenbach, for "Economical firewood for lighting fires at once."—4 years.—(Secret.)—Dated 2nd December, 1861.—(Saxon Patent, 1st March, 1861.)

525. James Gray, of Vienna, for "Improvements in machines for spinning wool, cotton, and flax."—2 years.—(Secret.)—Dated 2nd December, 1861.

526. Johann K. Habel and Alois Habel, of Vienna, for "Seal marks, being a substitute for wafers in sealing letters."—1 year.—(Secret.)—Dated 2nd December, 1861.

527. Carl Franz Wocelka, of Vienna, for "Improvements in his patent ink powder."—1 year.—(Secret.)—Dated 2nd December, 1861.

528. Schaeffer and Walcker, of Berlin, represented by G. Märkl, Vienna, for "A new process and apparatus for the manufacture of lighting gas."—1 year.—(Public.)—Dated 5th December, 1861.

529. Johann Kravogl, of Innsbruck, for "A pump for expanding and condensing atmospherie air."—1 year.—(Public.)—Dated 5th December, 1861.

530. Georg Günther, of Linz, for "A tachometer for expeditious drawing."—1 year.—(Public.)—Dated 5th December, 1861.

531. Heinr. Seifert, of Vienna, for "Improvements in cushions of billiard tables."—1 year.—(Secret.)—Dated 5th December, 1861.

532. J. M. Ottenheimer and Sons, of Wurtemberg, represented by J. A. Sonnenthal, Vienna, for "Improvements in looms for weaving stays."—7 years.—(Secret.)—Dated 5th December, 1861.—(Wurtemberg Patent, 28th June, 1861.)

533. Josephi Fevfar, of Vienna, for "A so-called 'Argand stove.'"—1 year.—(Public.)—Dated 5th December, 1861.

534. Farcot and Sons, of Paris, represented by Joseph Anton Von Sonnenthal, Vienna, for "Improvements in the construction of steam hammers."—1 year.—(Secret.)—Dated 5th December, 1861.

535. Mrs. Carl Kindl, of Vienna, for "Improvements in her Patent smoothing irons."—1 year.—(Public.)—Dated 5th December, 1861.

536. Ed. A. Paget, of Vienna, for "Improvements in sizing, drying, and warping yarns for weaving."—5 years.—(Public.)—Dated 7th December, 1861.

537. Jean Pierre Tajan, of Paris, represented by A. Martin, Vienna, for "A liquid for the mouth."—1 year.—(Secret.)—Dated 7th December, 1861.—(French Patent, 30th July, 1861.)

538. Joseph Berger, of Lipnik, for "Cocks for liquids, steam, and gas, for preventing escapes."—1 year.—(Secret.)—Dated 8th December, 1861.

539. Michael Richter, of Vienna, for "Manufacture of elastic neck ties on lace frames."—1 year.—(Secret.)—Dated 8th December, 1861.

540. Alfred Lenz, of Vienna, for "A means of preserving fermented beverages."—2 years.—(Public.)—Dated 6th December, 1861.

541. Salomon Braun, of Ungarisch-Ostra, for "Improvements in the construction of brick kilns."—1 year.—(Public.)—Dated 9th December, 1861.

542. Eduard A. Paget, of Vienna, for "Improvements in weighing machines."—2 years.—(Public.)—Dated 9th December, 1861.

543. August Halinbourg, of Paris, represented by A. Martin, Vienna, for "A rubbing surface for matches."—1 year.—(Secret.)—Dated 9th December, 1861.

544. Friedrich Paupié and Bernhard Nattland, of Adamsthal, for "Improvements in the moveable saw for sawing planks, as patented by the former on the 11th February, 1861."—2 years.—(Secret.)—Dated 9th December, 1861.

545. August Rauscher, of St. Veit, Carinthia, for "Improvements in the manufacture of ceruse."—3 years.—(Secret.)—Dated 10th December, 1861.

* For the Austrian Patent Law, see No. 231 of this Journal.

† In the case of inventions patented in other states as well as in Austria, the Specifications (whether described as "public" or not) may in most cases be consulted, or translations of them be had, at the Library of the Commissioners' Office.

546. Julius Kizitaff, of Manchester, represented by G. Märkl, Vienna, for "Improvements in the process of superheating steam by means of a so-called 'Oxyhydrogen retort.'"—3 years.—(Public.) —Dated 11th December, 1861.

547. Louis Bollmann, of Boston, U.S., represented by Fr. Rödiger, Vienna, for "Improvements in sewing machines."—1 year.—(Secret.)— Dated 11th December, 1861.

548. Gustav Wagenmann, of Vienna, for "Manufacture of moderator lamps for mineral oils, and converting oil moderators into moderators for mineral oil."—1 year.—(Public.)— Dated 11th December, 1861.

549. Heinrich Saruba, of Vienna, for "Improvements in his Patent apparatus for extracting water from coal."—1 year.—(Secret.)—Dated 12th December, 1861.

550. Franz Joseph Mörth and Theodor Bentz, of Wilhelmsburg, for "A peculiar firegrate."—1 year. —(Secret.)—Dated 12th December, 1861.

551. V. F. Cerveny, of Koniggrätz, for "Improvements in cylinder machines of brass instruments." —3 years.—(Secret.)—Dated 14th December, 1861.

552. Joseph Bedini, of Sinigaglia, represented by J. Valmagini, Vienna, for "Obtaining gas by chemical reactions even at a low temperature, and under the pressure of several atmospheres."— 1 year.—(Secret.)— Dated 14th December, 1861.

553. Joseph Bedini, of Sinigaglia, represented by J. Valmagini, Vienna, for "Air, water, and fireproof fastenings of doors, windows, hatches, &c." —1 year.—(Secret.)—Dated 14th December, 1861.

554. Joseph Bedini, of Sinigaglia, represented by J. Valmagini, Vienna, for "Rescuing vessels from water or fire."—1 year. —(Secret.)—Dated 14th December, 1861.

555. Franz Von Schwind, of Hall, for "Improvements in caloric engines."—1 year.—(Secret.) —Dated 16th December, 1861.

556. Nathaniel Clayton, Shuttleworth, and Carl Seeley, of Vienna, for "Improvements in machines for raising corn and other cereals."— 5 years.—(Public.)—Dated 16th December, 1861.

557. Nicolaus Meyer, of Vienna, for "Improvements in tubular boilers."—1 year.—(Public.)— Dated 16th December, 1861.

558. Ignaz Wokaun, of Vienna, for "A process for the manufacture of peat bricks without pressure and without waste of bitumen, and for expeditiously drying the same."—1 year.—(Public.)— Dated 16th December, 1861.

559. Basil and Demeter Nedelko, of Hungary, for "A pressing machine applicable to various industrial purposes, especially to wine."—1 year. —(Secret.)—Dated 16th December, 1861.

560. Alexander Friedmann and Emil Erlanger, of Paris, represented by Fr. Rödiger, Vienna, for "A system of heating steam engines, melting and baking furnaces."—1 year.—(Secret.) — Dated 16th December, 1861.

561. Marius Maxoni, of Milan, for "Improvements in writing telegraphs according to Morse's system."—2 years.—(Public.)—Dated 16th December, 1861.

562. Ignaz Divisch, of Funfhaus, for "A safety apparatus for coupling and uncoupling railway carriages."—1 year.—(Secret.)—Dated 25th December, 1861.

563. Franz Bergmann, of Vienna, for "Manufacture of all kinds of objects from single pieces of sheet metal."—1 year.—(Public.)— Dated 28th December, 1861.

564. Peter Sokel, of Vienna, for "A kind of pomatum made of oil and eggs."—1 year.— (Secret.)—Dated 28th December, 1861.

565. Alphons Loiseau and Eugen Tascher de la Pagerie, of Paris, represented by Fr. Rödiger, Vienna, for "Improvements in the manufacture of yarns, and apparatus belonging thereto."—1 year.—(Secret.) — Dated 28th December, 1861.

566. Ferdinand Leitenberger, of Reischstadt, for "Improvements in breech-loading cannons, whereby the gun and carriage may be made lighter."— 2 years.—(Secret.)—Dated 28th December, 1861.

567. Carl Eckling and Johann Hollub, of Vienna, for "A machine for obtaining double back-stitches."—1 year.— (Public.)—Dated 29th December, 1861.

568. Ludwig Anth. Soupart, of Belgium, represented by Fr. Rödiger, Vienna, for "Improvements in dressing and tanning hides."— 3 years.— Dated 29th December, 1861.

569. D. G. Fischel, Sons, of Prague, for "Obtaining lubricating oil from rapeseed as a substitute for olive oil."—1 year.—(Secret.)—Dated 28th December, 1861.

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2. Patents Prolonged.

422. Carl and Anton Köhler, for "Oil pomatum."—6th year. — (Secret.)— Dated 11th November, 1856.

423. Carl Herxel, for "A substance for clarifying liquids."—4th year.—(Secret.)—Dated 16th November, 1858.

424. Barbara Schmidt, for "Manufacture of socks of one single piece."—8th year.—(Public.)— Dated 20th November, 1854.

425. Heinrich Volter, for "An apparatus for obtaining wood pulp for the manufacture of paper." —6th year.—(Secret.)—Dated 27th November, 1856.

426. Daniel Hooibrenk, for "Improvements in the culture of mulberry trees."—4th year.— (Secret.)—Dated 10th December, 1856.

427. Daniel Hooibrenk, for "Improvements in the culture of vines."—4th year.—(Secret.)— Dated 10th December, 1858.

428. Anton Schindler, for "Improvements in galvanized matches." — 6th year. — (Secret.)— Dated 29th November, 1856.

429. Johann Straberger and Ludw. Schuster, for "Hydraulic cement."—6th year.—(Secret.)— Dated 5th December, 1856.

430. Andreas Weber, for "Peculiar Venetian blinds."—4th year.—(Public.)—Dated 24th January, 1859.

431. Willibald Schram, for "Improvements in double Jacquart machines."—3rd year.—(Secret.)—Dated 16th November, 1859.

432. Joseph Simon, for "A new composition, called 'Zeiodelite,' being a substitute for lead, porcelain, &c., in chemical apparatus, and for hydraulic cement, asphalt, &c., used for other purposes."—3rd year.—(Secret.)—Dated 16th January, 1860.

433. Heinrich Hofer, for "A regulator for preparing textile substances."—7th year.—(Public.)—Dated 30th December, 1856.

434. Samuel Singer, for "Double Springs for furniture."—4th year.—(Secret.)—Dated 2nd December, 1858.

435. Dollfus, Mieg, and Company, for "An application for calico-printing."—4th year.—Dated 4th March, 1859.

436. Peter Arnhofer, for "Improvements in chaff cutters."—4th and 5th years.—(Public.)—Dated 4th January, 1859.

437. Heinrich Daniel Schmid, for "Improvements in the construction of weighing machines."—9th year.—(Secret.)—Dated 22nd December, 1853.

438. Johann Gottlieb Köhler, for "Manufacture of striking clocks with self-repeating quarters."—6th year.—(Secret.)—Dated 27th November, 1856.

439. Severin Gavisics, for "Portable vapour and shower bath apparatus."—6th year.—(Secret.)—Dated 10th December. 1856.

440. Wilhelm Mathies, for "Improvements in water raising machines."—6th year.—(Public.)—Dated 10th December, 1856.

441. Johann Lihatscheff, for "Improvements in the manufacture of tuns, casks, &c."—3rd year.—(Secret.)—Dated 12th December, 1859.

442. Wilhelm Samuel Dobbs, for "Improvements in bars of fire-grates."—3rd year.—(Secret.)—Dated 16th December, 1859.

443. Franz Posner, for "Improvements in steam-manometers."—2nd year.—Dated 28th October, 1860.

444. Werner Siemens and Joh. Georg Halske, for "A dial-telegraph."—6th year.—(Public.)—Dated 30th December, 1856.

445. Dr. Franz Drinkwelder and Johann Keusch, for "Improvements in Krems' vine and other scissors."—11th year.—(Secret.)—Dated 23rd November, 1851.

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3. Patents which have become Void.

658. V. Crunel, for "Improvements in the construction of hand-mills for grinding coffee and other dry grain."—Dated 19th June, 1854; expired 19th June, 1861.

659. Michael Lamarche, for "Improvements in his manufacture of tiles as patented 7th March, 1854."—Dated 9th June, 1855; expired 9th June, 1861.

660. Sigmund Schwarz, for "A process for utilizing wool and wool waste for black and mixed woollen fabrics."—Dated 29th June, 1855; expired 29th June, 1861.

661. Joseph Morawetz, for "A simple construction of presses."—Dated 2nd June, 1856; expired 2nd June, 1861.

662. Friedrich Paget, for "Improvements in buffers of railway carriages."—Dated 10th June, 1856; expired 10th June, 1861.

663. Friedrich Paget, for "Improvements in buffers and other springs of railway and other carriages."—Dated 13th June, 1856; expired 13th June, 1861.

664. Friedrich Paget, for "Improvements in hardening, tempering, and restoring steel."—Dated 24th June, 1856; expired 24th June, 1861.

665. Friedrich Paget and Eduard Schmidt, for "Improvements in the manufacture of glass for ornaments."—Dated 24th June, 1856; expired 24th June, 1861.

666. Vincenz Danek, for "Fixing metal pipes on metal plates."—Dated 3rd June, 1858; expired 3rd June, 1861.

667. Leopold Holitscher, for "Improvements in the manufacture of furniture."—Dated 17th June, 1858; expired 17th June, 1861.

668. Peter Emich, for "A peculiar construction of cylinders for iron and other mills, composed of various parts of cast or wrought iron or steel."—Dated 18th June, 1858; expired 18th June, 1861.

669. Leopold Apfelthaler, for "Improvements in riveting brewing boilers."—Dated 23rd June, 1858; expired 23rd June, 1861.

670. Seraphine Agnese and Cajetan Ambrosioni, for "A system of boxes or cases, with a moveable bottom for loading and unloading goods."—Dated 23rd June, 1858; expired 23rd June, 1861.

671. Johann Schatzl, for "Improvements in smelting cast-iron chips in cupola furnaces."—Dated 27th June, 1858; expired 27th June, 1861.

672. Simon Marth, for "Improvements in copying presses, with an eccentric pressure."—Dated 2nd June, 1859; expired 2nd June, 1861.

673. Samuel Leporis, for "A peculiar construction of economical coke fire-places."—Dated 8th June, 1859; expired 8th June, 1861.

674. Theodore Nicolaus Meynier, for "An apparatus for washing coal and ores."—Dated 8th June, 1859; expired 8th June, 1861.

675. Eduard Pesier, for "Using alcohol in the manufacture of sugar for separating strange matters from the juice."—Dated 8th June, 1859; expired 8th June, 1861.

676. Friedrich Paget, for "Improvements in purifying, clarifying, and discolouring resin and resinous substances."—Dated 8th June, 1859; expired 8th June, 1861.

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* The Specifications of these Patents may be consulted in the original language, or translations be had at the Public Free Library.

677. Friedrich Eduard Schoch, for "Construction of a combined furnace for the manufacture of gas by simultaneously applying the waste heat to heating purposes." — Dated 10th June, 1859; expired 10th June, 1861.

678. Friedrich R. Löszl, Johann Greiner, and Wilhelm Durschmidt, for "A river boat with a self-propeller."—Dated 19th June, 1859; expired 19th June, 1861.

679. Johann Christoph Endris, for "Improvements in the manufacture of gas, and in preparing materials for gas-lights."—Dated 19th June, 1859; expired 19th June, 1861.

680. Joseph Zane, for "A machine for purifying water."—Dated 21st June, 1859; expired 21st June, 1861.

681. Theresia Preschels, for "Improvements in phosphor igniting apparatus."—Dated 21st June, 1859; expired 21st June, 1861.

682. Reinhold Reichenbach, for "A process for smelting iron and steel from ores."—Dated 23rd June, 1859; expired 23rd June, 1861.

683. Hiram Hutchinson, for "Printing and fixing relief figures and designs of caoutchouc and similar resin on linen, cotton, silk, felt, leather, &c. by means of engraved cylinders."— Dated 23rd June, 1859; expired 23rd June, 1861.

84. Em. Biach, and Company, for "Improvements in the manufacture of resinous oil."—Dated 1st June, 1860; expired 1st June, 1861.

685. Bernhard Fischer, for "Protecting dresses from the effects of perspiration and rendering their seams more durable."—Dated 1st June, 1860; expired 1st June, 1861.

686. Laurenz Kempter and Wenzel Ferby, for "An apparatus for preventing candles from dropping."—Dated 1st June, 1860; expired 1st June, 1861.

687. Franz Brutscher, for "Improvements in his Patent manifold copying press."—Dated 1st June, 1860; expired 1st June, 1861.

688. Carl Ellenberger, for "A process for rendering stone, bricks, cement, and plaster, harder, more durable, fit to be polished, and waterproof."—Dated 1st June, 1860; expired 1st June, 1861.

689. Stephen Mayer, for "Improvements in water closets."—Dated 1st June, 1860; expired 1st June, 1861.

690. Carl Heksch, for "Improvements in expeditious tanning and rendering hides more elastic."—Dated 1st June, 1860; expired 1st June, 1861.

691. Johann Bazant, for "Improvements in rolling mills for flattening iron."—Dated 7th June, 1860; expired 7th June, 1861.

692. Conrad Otto, for "Improvements in coffee machines, applicable also to other purposes."—Dated 8th June, 1860; expired 8th June, 1861.

693. Ignaz Kapfer, for "A peculiar construction of the water reservoirs in fire-engines."—Dated 12th June, 1860; expired 12th June, 1861.

694. Carl Kindl, for "Smoothing irons that are heated inside."—Dated 12th June, 1860; expired 12th June, 1861.

695. Bartholomäus Dworak, for "Moveable seats of closets for rendering them inodorous."—Dated 13th June, 1860; expired 13th June, 1861.

696. Anton Patzelt, for "A moveable carriage for hawking."—Dated 13th June, 1860; expired 13th June, 1861.

697. Julian Hecker, for "Using electro-magnetism for increasing the adhesion of the wheels of railway carriages, being also applicable to breaks."—Dated 13th June, 1860; expired 13th June, 1861.

698. Wilhelm Szarvas and Hermann Hollefreund, for "A peculiar method of obtaining starch from maize or millet."—Dated 13th June, 1860; expired 13th June, 1861.

699. Ferdinand Teirich, for "A portable battery for field and railway telegraphs."—Dated 16th June, 1860; expired 16th June, 1861.

700. Wilhelm Szarvas and Hermann Hollefreund, for "A method of obtaining alcohol and yeast from maize or millet."—Dated 16th June, 1860; expired 16th June, 1861.

701. Franz Czervenka, for "Improvements in his wheel-barrows, as patented 13th April, 1860."—Dated 16th June, 1860; expired 16th June, 1861.

702. Friedrich Paget, for "Improvements in bars of fire-grates."—Dated 16th June, 1860; expired 16th June, 1861.

703. Andes and Fröbe, for "Smelting resin of copal and amber into lac."—Dated 16th June, 1860; expired 16th June, 1861.

704. Joseph Darebuy, for "Improvements in the construction of portable ice-cellars for cooling casks."—Dated 16th June, 1860; expired 16th June, 1861.

705. Gottlieb Schmelkes, for "A so-called 'Ambulant business diary.'"—Dated 17th June, 1860; expired 17th June, 1861.

706. Hugo Bratke, for "A machine, called 'Snow-mill,' for removing the snow from railways."—Dated 18th June, 1860; expired 18th June, 1861.

707. Joseph Poszdech, for "Improvements in field forges."—Dated 18th June, 1860; expired 18th June, 1861.

708. Joseph Poszdech, for "Double action cylinder bellows."—Dated 18th June, 1860; expired 18th June, 1861.

709. J. A. Hübner, for "An apparatus for regulating the fire and heat of stoves, kitchen-ranges, &c."—Dated 19th June, 1860; expired 19th June, 1861.

710. Stephan Farkas, for "Improvements in the construction of ploughs."—Dated 21st June, 1860; expired 21st June, 1861.

711. Emil Gruner, for "Obtaining ores free from gangue, and treating the same by the wet process."—Dated 21st June, 1860; expired 21st June, 1861.

712. Simon Turnowsky, for "A peculiar penholder."—Dated 21st June, 1860; expired 21st June, 1861.

713. Pius Fink, for "Manufacture of pens."—Dated 21st June, 1860; expired 21st June, 1861.

714. Johann Nepom Reithoffer, for "A peculiar reservoir for mash in the manufacture of wine, and heating apparatus and bung belonging thereto."—Dated 21st June, 1860; expired 21st June, 1861.

715. Joseph Hirschmann, for "Inodorous and siccative paint."—Dated 23rd June, 1860; expired 23rd June, 1861.

716. Adrian Stokar and Johann Lugsch, for "A peculiar construction of safety valves for steam boilers."—Dated 23rd June, 1860; expired 23rd June, 1861.

717. Arnold Postelberg, for "A vaginal plug."—Dated 24th June, 1860; expired 24th June, 1861.

718. Friedberg Hilbert, for "A double action lift and force apparatus for deep wells."—Dated 24th June, 1860; expired 24th June, 1861.

719. Eugen Lardenois, for "Manufacture of paper pulp from plants."—Dated 29th June, 1860; expired 29th June, 1861.

720. Gustav Fichtner, for "So-called 'Fast-loading guns.'"—Dated 29th June, 1860; expired 29th June, 1861.

721. Franz Xaver Marenzeller, for "A machine for washing spodium for sugar works."—Dated 30th June, 1860; expired 30th June, 1861

722. Adolph Az, for "A cosmetic called 'Sicilian milk."—Dated 30th June, 1860; expired 30th June, 1861.

723. Nicolaus Rabe, Martin Riener and Vincenz Gurnigg, for "Protecting timber from rot by means of an impregnation of soot or peat water."—Dated 19th April, 1859; expired 19th April, 1861.

724. Anton Tichy, for "Improvements in combing wool."—Dated 24th June, 1851; expired 24th June, 1861.

725. Martin Miller, sen., for "Improvements in the manufacture of springs for clocks and crinoline petticoats." — Dated 16th July, 1860. — Partly annulled 6th December, 1861, for want of novelty in the so-called "cylinder furnace," and to the use of fat for hardening the springs, and of lead for tempering the same.

726. Anton Perner, for "A machine for the manufacture of wooden pegs for shoemakers."—Dated 8th January, 1860.—Partly annulled 6th December, 1861, for want of novelty in the plane employed in said manufacture.

727. Wilhelm Pollak, for "Removing the acid from rape oil."—Dated 18th November, 1853; expired 18th November, 1861.

728. Jacob Philipp Hirsch, for "Manufacture of hats of woollen, cotton, or silk fabrics with invisible seams."—Dated 7th November, 1859; expired 7th November, 1861.

729. M. A. Weikersheim and Company, for "A peculiar process and apparatus for obtaining large quantities of sulphuret of carbon."—Dated 17th March, 1858; disclaimed 18th October, 1861.

730. M. H. Weikersheim and Company, for "A peculiar process and apparatus for obtaining stearine from fats and oil by means of sulphuret of carbon."—Dated 17th March, 1858; disclaimed 18th October, 1861.

731. M. H. Weikersheim and Company, for "A peculiar process and apparatus for extracting oil from vegetable and animal substances, and from wool, bones, and leather, by means of sulphuret of carbon."—Dated 27th March, 1858; disclaimed 18th October, 1861.

732. Michael Winkler, for "Improvements in machines for damping copying paper."—Dated 25th September, 1861; disclaimed 18th November, 1861.

733. John Haswell, for "Improvements in steam hammers."—Dated 24th August, 1852; expired 24th August, 1861.



FRANCE.

Current List of Patents of Invention and Certificates of Addition.

1861.

(Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.)

Note.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

51,084. Gaillon, of 90, Rue de Grenelle St. Germain, Paris, for "Venetian blinds."—Dated 7th September, 1861.

51,085. Gompertz, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Arrangements in clasps or so-called 'Fairy clasp.'"—Dated 16th August, 1861.

51,086. Kerautrel and Son, of 2, Rue du Bois d'Armour, Brest, for "A substitute for bricks and hewn stone in building."—Dated 16th September, 1861.

51,087. Laporte, of Rochefort, for "A shoulder measure applicable to the manufacture of all kinds of dresses."—Dated 14th September, 1861.

51,088. Masson, of 39, Rue de l'Abbaye, Paris, for "A kind of taps."—Dated 7th September, 1681.

51,089. Mireaux, represented by Rémy, of Melun, for "An apparatus for breaking clods."—Dated 31st August, 1861.

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* For the French Patent Law see No. 228 of this Journal.

51,090. Mongin and Comp., of 11, Rue des Juifs, Paris, for "Improvements in presses and punches." —Dated 7th September, 1861.

51,091. Moreau, represented by Chantraine, of 27, Rue d'Anton, Paris, for "An electro-magnetic apparatus for operations relating to the electricity of seeds, plants, and flowers."—Dated 22nd July, 1861.

51,092. Moreau, represented by Ricordeau, of 23 Boulevart de Strasbourg, Paris, for "A bell signa' for railways."—Dated 7th September, 1861.

51,093. Muller and Cretzschmar, represented by Bresson, of 51, Rue de Malte, Paris, for "A flexible photographic album imitating guard binding, with full and plain edges."—Dated 7th September, 1861.

51,094. Nouveau, sen., and Piérotin, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Hermetic goblet stoppers."—Dated 6th September, 1861.

51,095. Nouveau, sen., and Piérotin, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Stoppering vessels containing gaseous liquids." —Dated 7th September, 1861.

51,096. Olive, of 202, Grand Chemin de Toulon, Marseille, for "Improvements in carriages."— Dated 12th September, 1861.

51,097. Pellion, of Dijon, for "A photographic album."—Dated 14th September, 1861.

51,098. Pognon and Leclère, the former of 24, Rue du Chateau, Montmartre, and the latter of 70, Rue du Cherche-Midi, Paris, for "A steam furnace and generator.—Dated 6th September, 1861.

51,099. Ravy, Demarne, and Noblet, of 20, Rue de la Mare, Paris-Belleville, for "So-called 'Egyptian foot coverings.'"—Dated 7th September, 1861.

51,100. Rebier and Valois, of St. Pierre les Calais, for "A kind of bottom of lace work."—Dated 14th September, 1861.

51,101. Rigot, of 108, Avenue de Saxe, Lyon, for "Improvements in the manufacture of velvet."— Dated 17th September, 1861.

51,102. Rousset, of 15, Quai Tourville, Brest, for "A machine for cutting granite."—Dated 16th September, 1861.

51,103. Royer, of 10, Rue Neyron, St. Etienne, for "A mechanism, called 'Racket drum' for machines for weaving velvet ribbon."—Dated 17th September, 1861.

51,104. Turner and Yates, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in weaving."—Dated 7th September, 1861. —(English Patent, 6th June, 1861.)

51,105. Aaron Bonehill, of Valenciennes, for "A small furnace for heating pig-iron."—Dated 21st September, 1861.

51,106. Armandies, domiciled with Baillon, of 38, Rue du Chemin-Vert, Paris, for "A pump with a moveable beam."—Dated 9th September, 1861.

51,107. Barnett, of 164, Rue de Rivoli, Paris, for "Railway signals." — Dated 10th September, 1861.

51,108. Baudit, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Buckles."—Dated 7th September, 1861.

51,109. Bayard Brothers, and Lemonnier, sen. and jun., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Fixed hat-bodies." —Dated 10th September, 1861.

51,110. Bernardi, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Fountain penholders." —Dated 11th September, 1861.

51,111. Bienez, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A mode of paving."—Dated 10th September, 1861.

51,112. Bouasse, sen., of 29, Rue St. Sulpice, Paris, for "Metal mountings of pictures."—Dated 9th September, 1861.

51,113. Charrière, of 6, Rue de l'Ecole de Medecine, Paris, for "An instrument called 'Ointment holder.'"—Dated 9th September, 1861.

51,114. Colombi, Son, of 3, Quai Conti, Paris, for "Means of observing microscopic and other objects."—Dated 9th September, 1861.

51,115. Cosnier, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Improvements in the manufacture of various games, such as backgammon, draughts, chess, &c."—Dated 9th September, 1861.

51,116. Cribier, jun., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kind of petticoats, called 'Chessboard petticoats.'"— Dated 10th September, 1861.

51,117. Delby, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A kind of hooks for fastening dresses and foot coverings, being a substitute for clasps, buttons, and buckles."—Dated 9th September, 1861.

51,118. Duballe, with Duguilleux, of 34, Rue du Chevaberet, Ivry, for "An apparatus for cleaning cylinders of steam-engines."—Dated 9th September, 1861.

51,119. Duval, represented by Brade, of 29, Rue Ste. Anne, Paris, for "Improvements in external cocks of gas-pipes." — Dated 9th September, 1861.

51,120. Girard, of 15, Rue Curiaterie, Marseille, for "A so-called 'Acidiferous product.'" —Dated 5th September, 1861.

51,121. Gye, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in the mode of obtaining light, and in apparatus used thereat."—Dated 9th September, 1861.—(English Patent, 15th April, 1861.)

51,122. Hardy, represented by Gallois, of 4, Rue du Vieux Chemin, Paris, for "A field arm chair with moveable pieces."—Dated 9th September, 1861.

51,123. Hatton, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A liqueur, being a substitute for absinth."—Dated 6th September, 1861.

51,124. Heussebrot, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Ornamenting smoking pipes and cigar mouth-pieces.' —Dated 10th September 1861.

51,125. Kwik, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A thread box for tailors and seamstresses."—Dated 7th September, 1861.

51,126. Lafargue and Fouga, of 104, Cours Napoléon, Bordeaux, for "A cage petticoat."—Dated 20th September, 1861.

51,127. De Lara and Du Ren, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Treatment of peat."—Dated 7th September, 1861.

51,128. Livesey, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Manufacture of lace-work or lace for embroideries, trimmings, and other ornaments."—Dated 9th September, 1861.

51,129. Merklen, of Mulhouse, for "Mandrils of wrought iron, coated with red copper, used as rollers for calico printing."—Dated 19th September, 1861.

51,130. Newman, of 92, Rue du Faubourg-Poissonnière, Paris, for "Toilet soap."—Dated 10th September, 1861.

51,131. Oppenheim, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the manufacture of printed shirt fronts."—Dated 10th September, 1861.

51,132. Rheins, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in flat or relief impressions on tissues."—Dated 10th September, 1861.

51,133. Tiroloy, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "A mode of towing boats on canals."—Dated 9th September, 1861.

51,134. Vallin, of à la Ville en Bois, for "A bridle bit."—Dated 10th September, 1861.

51,135. Walker and Tilson, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in machines or apparatus for the manufacture of press-point and lace."—Dated 9th September, 1861.—(English Patent, 9th March, 1861.)

51,136. Aché and Bourdelles, of Agen, for "Improvements in Camuzat's mode of applying sheet-iron to the manufacture of wooden shoes, as patented 25th July, 1855.—Dated 20th September, 1861.

51,137. Oucler and Son, of 63, Boulevart de Sebastopol, Paris, for "A coon of balls of thread, silk, cotton, &c."—Dated 12th September, 1861.

51,138. Ballotaud, of Aigre, for "Revolving headdresses with candles."—Dated 18th September, 1861.

51,139. Bernard Moignet, of Amiens, for "Dental apparatus."—Dated 20th September, 1861.

51,140. Bigot, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A slide of chimneys."—Dated 12th September, 1861.

51,141. Bourchani, of 10, Rue des Remparts-d'Ainay, Lyon, for "A mode of emptying cesspools by means of syphons."—Dated 19th September, 1861.

51,142. Caillat, of 48, Rue Aumaire, Paris, for "Applying horn plated with tortoiseshell to the manufacture and ornamentation of combs."—Dated 11th September, 1861.

51,143. Cajot, domiciled with Lhoir, of Rue Colbert, Lille for "Using the residues of pyrites obtained from chemical works as common iron ore, and for extracting the sulphur therefrom."—Dated 25th September, 1861.

51,144. Flamand, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Powdered impressions on velvet and other tissues."—Dated 12th September, 1861.

51,145. Fontenay, of 1, Rue des Récollets, Grenoble, for "Blinds of gauze-wire for protecting apartments from flies and other insects."—Dated 19th September, 1861.

51,146. Gruet, represented by Bresson, of 51, Rue de Malte, Paris, for "Improvements in glaziers' work."—Dated 12th September, 1861.

51,147. Guignié, Brothers, of Grenoble, for "Strengthening gloves."—Dated 18th September, 1861.

51,148. Lefebvre and Allemand, of 17, Rue du Pont-aux-Chous, Paris, for "A combined sieve and grate."—Dated 11th September, 1861.

51,149. Legardeur, of Blercourt, for "A mirror with a pedal for catching larks."—Dated 27th September, 1861.

51,150. Lemmens, of 147, Rue du Faubourg St. Martin, Paris, for "A kind of passe-partout frame."—Dated 11th September, 1861.

51,151. Levesque de la Ferriére, of Redont sur-le-Port, for "Improvements in bee-hives."—Dated 14th September, 1861.

51,152, Lucas, of Cherbourg, for "A thrashing machine."—Dated 20th September, 1861.

51,153. Luce, of Plaine des Roses, Dijon, for "A circular loom for the manufacture of plain, figured, warped, open-worked, or other tricots."—Dated 23rd September, 1861.

51,154. Maillet, of 17, Rue Talleyrand, Reims, for "Manufacture of lithographic impressions that cannot be imitated."—Dated 21st September, 1861.

51,155. Marland, of 81, Quai des Curandiers, Rouen, for "A continuous mode of rolling iron and other iron."—Dated 23rd September, 1861.

51,156. Mollet, of Irigny, for "A windmill with vertical paddles."—Dated 19th September, 1861.

51,157. Négre, of 6, Rue des Gants, Bordeaux, for "Flaps of trousers and waistcoats."—Dated 24th September, 1861.

51,158. Peillon, of 8, Cours Lafayette, Lyon, for "A process for distilling bituminous ores."—Dated 23rd September, 1861.

51,159. Piron, of Tonnerre, for "An apparatus for heating the oil of locomotive lanterns."—Dated 24th September, 1861.

51,160. Poussier, domiciled with Berthelot, of 19, Rue du Bouloi, Paris, for "Treatment of animal substances, &c."—Dated 12th September, 1861.

51,161. Beverdy, of 42, Rue St. Rome, Toulouse, for "A process for rendering stuffs that are washed fireproof."—Dated 18th September, 1861.

51,162. Rosenthal, domiciled with Mathieu Barraine, of 88, Rue de Clichy, Paris, for "Artificial sets of teeth mounted on aluminium."—Dated 12th September, 1861.

51,163. Salneuve-Mathia and Salneuve-Bonnabaud, the former of Aigueperse, and the latter, of Randau, for "Manufacture of burnt almonds."—Dated 14th September, 1861.

51,164. Th. Eschweiler Mining and Smelting Company, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A wall adjoining two single furnaces for reducing zinc, each containing seventy-two muffles."—Dated 12th Seprember, 1861.

51,165. Thompson, represented by Le Blanc, of 8, Rue Ste. Appoline Paris, for "A printing telegraph."—Dated 12th September,1861.

51,166. Weiller and Vignon, of Angoulême, for "A mode of fixing all kinds of relief designs on gauze wire and other canvass by means of all kinds of thread, and using said tissues for obtaining the same designs on paper pulp and dry paper."—Dated 20th September, 1861.

51,167. Beau, of 76, Rue de l'Ecole de Medecine, Paris, for "An apparatus for dividing or cutting battens."—Dated 16th September, 1861.

51,168. Bertain, of Impasse des Prés St. Gervais, Paris, for "Improvements in the manufacture of matches."—Dated 14th September, 1861.

51,169. Birkbeck, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in propelling vessels."—Dated 17th September, 1861.

51,170. Blondel and Mourey, represented by Le Biane, of 2, Rue Ste. Appoline, Paris, for "Applying platina to strings of pianos and other musical instruments."—Dated 13th September, 1861.

51,171. Bonvallet, of 6, Passage des Jardins, Montrouge, for "Improvements in sewing machines."—Dated 16th September, 1861.

51,172. Boulard, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A kind of truss."—Dated 12th September, 1861.

51,173. Cavenne, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Applying mica."—Dated 12th September, 1861.

51,174. Colquhoun and Thomson, represented by Combres, of 28, Rue du Garde, Paris, for "Improvements in the construction of bars of grates of furnaces."—Dated 13th September, 1861.—(English Patent, 27th July, 1861.)

51,175. Danduran, of 8, Rue Lamartine, Paris, for "A mode of advertising."—Dated 16th September, 1861.

51,176. Fialon and Margry and Comp., domiciled with the former, of 29, Rue du Mail, Paris, for "A tissue for the manufacture of hats."—Dated 17th September, 1861.

51,177. Goupi and Vincent, the former of 28, Rue St. Georges, and the latter of 9, Rue Ferdinand du Temple, Paris, for "A mode of propulsion."—Dated 16th September, 1861.

51,178. Goursseau, sen., and Lestonnat, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "A gasogene safety apparatus."—Dated 16th September, 1861.

51,179. Hund, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A toy, called 'Self-acting puzzle theatre.'"—Dated 13th September, 1861.

51,180. Joyce, represented by Brade, of 29, Rue Ste. Anne, Paris, for "Means of representing various meteorological phenomena by typography."—Dated 14th September, 1861.

51,181. Knein, of 36, Rue Phélippeaux, Paris, for "A photographie album in a pocket book."—Dated 16th September, 1861.

51,182. Lambert, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of nails of malleable cast-iron."—Dated 12th September, 1861.

51,183. Leconte, represented by Bresson, of 51, Rue de Malte, Paris, for "Improvements in apparatus for extracting beetroot juice."—Dated 16th September, 1861.

51,184. Martinez-Lopez, of 15, Rue de Longchamps, Neuilly, for "A registering sowing machine."—Dated 16th September, 1861.

51,185. Mendes da Costa, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in apparatus for superheating steam."—Dated 12th September, 1861.

51,186. Myers and Cavenaile, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Buffers, suspension and hooks, for railway and other carriages.—Dated 14th September, 1861.

51,187. Rexroth and Plaz, of 21, Rue Grangesaux-Belles, Paris, for "A mechanical contrivance for trimming stays, being also applicable to sewing machines."—Dated 13th September, 1861.

51,188. Riffler, of 76, Rue Notre Dame de Nazareth, Paris, for "A safety box for watches."—Dated 13th September, 1861.

51,189. Robert, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Shirts with moveable fronts."—Dated 14th September, 1861.

51,190. Sidobre, of 60, Boulevart de Strasbourg, Paris, for "A cigar cutter."—Dated 13th September, 1861.

51,191. Stanley, Williams, and Millard, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "Improvements in carburetting gas by liquid hydrocarburets for increasing its lighting power."—Dated 17th September, 1861.

51,192. Thomas, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in racks for dressing ladies' bonnets."—Dated 14th September, 1861.

51,193. Tiré, represented by Castelbon, of 15, Rue des Petites-Ecuries, Paris, for "Wire pipes for conveying water, gas, steam, &c."—Dated 14th September, 1861.

51,194. Trachsel and Clayton, represented by Courrouve, of 28, Rue Feydeau, Paris, for "Improvements in the manufacture of gas for artificial light, and in apparatus for obtaining a luminous

substance." — Dated 12th September, 1861. — (English Patent, 15th March, 1861.)

51,195. Vandevyver with Odiot, of 10, Impasse d'Antin, Paris, for "A universal mode of fastening."—Dated 17th September, 1861.

51,196. Vatel, domiciled with Savaglier, of 21, Rue d'Aval, Paris, for "Improvements in lamp lanterns."—Dated 16th September, 1861.

51,197. Wood, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in the mode of cooling the atmosphere of shops or other places where a low temperature is to be maintained or produced." — Dated 14th September, 1861. — (English Patent, 31st July, 1861.)

51,198. Badoil and Comp., of 4, Rue Impériale, Lyon, for "Ornamenting fabrics by means of mixed broche and embroidery."—Dated 24th September, 1861.

51,199. Bernard, of 54, Rue Croix-de-Séguey, Bordeaux, for "A washing machine."—Dated 1st October, 1861.

51,200. Cantagrel, of 2, Rue Beaumes, Montpellier, for "A cosmographic apparatus."—Dated 17th September, 1861.

51,201. Chartre, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A system of sideboards."—Dated 17th September, 1861.

51,202. Cornélis, represented by Bresson, of 51, Rue de Malte, Paris, for "A top with an internal fly-wheel."—Dated 19th September, 1861.

51,203. Desmons, of Roubaix, for "A picker driver."—Dated 27th September, 1861.

51,204. Dubosc, Son, of 13, Route de Caen, Rouen, for "An eccentric with a continuous contact for drivers of looms."—Dated 28th September, 1861.

51,205. Ferrand and Coupillaud, of Angoulême, for "A mode of packing bottles and all kinds of glass articles." — Dated 27th September, 1861.

51,206. Fusellier, of Montreuil-Bellay, for "A machine for thrashing and cleaning grain." — Dated 30th September, 1861.

51,207. Ganier, sen., of 2, Passage Piemontesi, Paris, for "A mode of advertizing."—Dated 18th September, 1861.

51,208. Geismar, of 32, Rue Bellefond, Paris, for "A portable jointed shaft of carriages."—Dated 19th September, 1861.

51,209. Gontier, of Avesnières, for "A horse-gin with a horizontal beam on the ground."—Dated 27th September, 1861.

51,210. Guirand, of 4, Traverse St. Charles, Marseille, for "A machine for the manufacture of matches for mining." — Dated 25th September, 1861.

51,211. Jacquet, of 6, Rue St. Antoine, Besançon, for "A caliber for Lepine's watches."—Dated 27th September, 1861.

51,212. Jaunin and Menevalle, of 5, Quai de la Seine, Paris, for "A steam crane."—Dated 19th September, 1861.

51,213. Joly, of Grenoble, for "Improvements in electrical apparatus." — Dated 28th September, 1861.

51,214. Kottula, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in the manufacture of soap."—Dated 19th September, 1861.

51,215. Martin de Lignac, represented by Gannal of 6, Rue de Seine, Paris, for "Preserved and compressed meat prepared with concentrated beef-tea."—Dated 19th September, 1861.

51,216. Mary, of Douarmenez, for "A purifying stove for firying sardines."—Dated 28th September, 1861.

51,217. Medlock, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in preserving fermented beverages." — Dated 18th September, 1861.—(English Patent, 30th March, 1861.)

51,218. Montucci, of 38, Rue du Sentier, Paris, for "Goffering fabrics." — Dated 18th September, 1861.

51,219. Pantin and Hamon, of Sourdeval-la-Barre, for "Manufacture of boxes of locks of rolled and cut zinc, cast zinc bolts, &c."—Dated 17th September, 1861.

51,220. Parent, Hamlet, and Comp., of 7, Rue Pierre Levée, Paris, for "Improvements in buttons."—Dated 19th September, 1861.

51,221. Ponti, represented by Combres, of 19, Boulevart Bonne Nouvelle, Paris, for "An optical apparatus, called 'Alethoscope.'"—Dated 30th August, 1861.

51,222. Silacci, of 22, Rue Notre-Dame-de-Nazareth, Paris, for "A counter for carriages."—Dated 18th September, 1861.

51,223, Tisy, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of paper."—Dated 17th September, 1861.

51,224. Torta-Thiéry, of 247, Rue St. Martin, Paris, for "A kind of top."—Dated 17th September, 1861.

51,225. Vernet, sen., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Illustrated cigaret-paper."—Dated 18th September, 1861.

51,226. Waymel, of Amiens, for "A coke stove."—Dated 24th September, 1861.

51,227. Weber-Blech, of Mulhouse, for "An apparatus for measuring liquids."—Dated 20th September, 1861.

51,228. Zimberg, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Ornamenting caskets, travelling cases, &c."—Dated 18th September, 1861.

51,229. Alexandre and Dangy, of Nouzon, for "A system applicable to the manufacture of nails for horse-shoes."—Dated 27th September, 1861.

51,230. Alix and Guy, the former of 103, Quai Valmy, the latter of 12, Rue de la Bruyère, Paris, for "A break for carriages."—Dated 21st September, 1861.

51,231. Audineau, represented by Guillon, of 22, Rue Pigalle, Paris, for "A fore-carriage."—Dated 21st September, 1861.

51,232. Bethell, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of soap, and in compositions for lubricating railway carriages and engines and others."—Dated 21st September, 1861.

51,233. Billaz, of 5, Rue St. Pierre, Lyon, for "Using flexible and impervious substances (such as india rubber, skins, tissues, &c.) in any shape as counters of liquids, so as to transmit their pressure either directly or indirectly without mixing the liquids contained in the counter."—Dated 30th September, 1861.

51,234. Boyer, jun., domiciled 92, Boulevart de Sébastopol, Paris, for "Manufacture of goffered gloves."—Dated 21st September, 1861.

51,235. Chameroy, of 162, Rue du Faubourg St. Martin, Paris, for "Tiles."—Dated 21st September, 1861.

51,236. Cheradame, Cadart, and Chevalier, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "A system of divisions of towns, villages, &c."—Dated 21st September, 1861.

51,237. Costal, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A moveable guide for sewing machines."—Dated 21st September, 1861.

51,238. Doehnel, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in fur comforters."—Dated 19th September, 1861.

51,239. Dupré, of Château-Gontier, for "A mode of moderating the rolling and pitching of vessels."—Dated 2nd October, 1861.

51,240. Gammon, represented by Amouroux, of 333, Rue St. Martin, Paris, for "Improvements in ventilators."—Dated 20th September, 1861.

51,241. Garsault-Petit, of Thouars, for "A harvester and thrashing machine."—Dated 2nd October, 1861.

51,242. Gillett, of 3, Quai de Retz, Lyon, for "A lithographic press."—Dated 28th Sptember, 1861.

51,243. Haley, represented by Brandon, of 13, Rue Gaillon, Paris, for "Improvements in looms."—Dated 20th September, 1861.—(English Patent, 21st March, 1861.)

51,244. Heaven and Smith, represented by Brandon, of 13, Rue Gaillon, Paris, for "Improvements in embroidering machines."—Dated 20th September, 1861.—(English Patent, 21st March, 1861.)

51,245. Maliquet and Teste, with Pignon, of 24, Rue Impériale, Lyon, for "A gas burner for purifying gas."—Dated 28th September, 1861.

51,246. Martin and Arragon, with Feuillat, of 18, Rue Ferrandière, Lyon, for "Improvements in looms."—Dated 30th September, 1861.

51,247. Massey, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A safety lock, applicable to letter and other bags."—Dated 20th September, 1861.

51,248. Monfran, represented by Girard, jun., of 96, Rue de Bondy, Paris, for "A combined table, toilet, and writing desk."—Dated 21st September, 1861.

51,249. Passager, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A so-called 'Indian lamp.'"—Dated 21st September, 1861.

51,250. Regnault, of Mohon, for "A machine for the manufacture of nails by the hot process."—Dated 1st October, 1861.

51,251. Roblin and Nicolas, of St. Etienne, for "Manufacture of large forge pieces without welding."—Dated 30th September, 1861.

51,252. De Sainte-Marie, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A closed battery."—Dated 21st September, 1861.

51,253. Saugy and Gomier, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "A sewing machine applicable chiefly to hosiery articles, for obtaining quilted, chain, and mantua stitches."—Dated 21st September, 1861.

51,254. Searby, represented by Amouroux, of 333, Rue St. Martin, Paris, for "Improvements in gauges or manometers"—Dated 21st September, 1861.

51,255. Selinque, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A life dress for mariners, &c."—Dated 21st September, 1861.

51,256. Thurlow, represented by Brandon, of 13, Rue Gaillon, Paris, for "Improvements in traction engines."—Dated 20th September, 1861.—(English Patent, 10th July, 1861.)

51,257. Trouvé, of 33, Boulevart D'Ivry, Paris, for "A railway break."—Dated 21st September, 1861.

51,258. Wagner, of 14, Rue de Percy St. Antoine, Paris, for "Improvements in drawing knives."—Dated 21st September, 1861.

51,259. Wynants, domiciled with Hérode, of 229, Rue de Paris, Lille, for "A chase for locking up forms."—Dated 4th October, 1861.

51,260. André, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in the construction of iron and wooden floors."—Dated 24th September, 1861.

51,261. Berteu, of 95, Rue de Charonne, Paris, for "A system of paddles, applicable to steam boats for increasing their speed."—Dated 23rd September, 1861.

51,262. Brecaire and Poulot, of 8, Barrière du Combat, Paris, for "A kind of wrench."—Dated 23rd September, 1861.

51,263. Butez, represented by Guion, of 29, Boulevart St, Martin, Paris, for "A lighting apparatus applicable to street and other doors."—Dated 25th September, 1861.

51,264. Cappelli, represented by Safray, of 3, Rue Gareau, Paris, for "Photographic velvet bottoms with graduated tints."—Dated 24th September, 1861.

51,265. Delahaye, represented by Brade, of 15, Rue Neuve Ménilmontant, Paris, for "Improvements in so-called 'Double Brabant ploughs.'"—Dated 26th September, 1861.

51,266. Dellagana, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in machines for stereotyping, applicable also to other purposes."—Dated 23rd September, 1861.

51,267. Elwell, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in ball or centrifugal regulators."—Dated 23rd September, 1861.

51,268. Fehrer, represented by Bresson, of 51, de Malte, Paris, for "Applying the substance called 'Parisian marble,' and products obtained therefrom."—Dated 26th September, 1861.

51,269. Fortin and Caillon, of 86, Boulevart de Sébastopol, Paris, for "A system of compartments for travelling cases, &c."—Dated 21st September, 1861.

51,270. Gasseau, of 10, Rue Lacuée, Paris, for "An electrical motor."—Dated 24th September, 1861.

51,271. Guiguet, represented by Guion, of 29, Boulevart Saint Martin, Paris, for "A moderator lamp for workshops."—Dated 24th September, 1861.

51,272. Halinbourg, of 21, Rue Meslay, Paris, for "Friction surfaces for matches."—Dated 26th September, 1861.

51,273. Hasenfeld, son, of 12, Place de la Bourse, Paris, for "A kind of sowing machine."—Dated 25th September, 1861.

51,274. Hoël, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A manometer applicable to all kinds of steam engines."—Dated 24th September, 1861.

51,275. Kugge, of 9, Passage Ste. Avoie, Paris, for "A kind of casket."—Dated 24th September, 1861.

51,276. Lachanal, of 9, Rue Lemercier, Paris, for "Artificial flowers." — Dated 24th September, 1861.

51,277. Langlois, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in so-called 'Tubular apparatus for classifying ores.'"—Dated 24th September, 1861.

51,278. Le Maistre, of 75, Rue de la Pépinière-Montrouge, Paris, for "A so-called 'Gas hydrodynamic cock.'"—Dated 24th September, 1861.

51,279. Lemoine, of 34, Rue St. Paul, Paris, for "A mode of closing the joints of pipes, especially of gas and water pipes."—Dated 26th September, 1861.

51,280. Limouzain, of 74, Rue du Faubourg St. Martin, Paris, for "Improvements in metallic barometers."—Dated 24th September, 1861.

51,281. Mertian, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "A calimeter or apparatus for mixing lime water in cane juice during defecation."—Dated 23rd September, 1861.

51,282. Molard, of 4, Rue Favart, Paris, for "A mode of advertizing."—Dated 25th September, 1861.

51,283. Monteaureano, of 9, Quai Bourbon, Paris, for "A toy consisting of a kite that produces the sound of a drone."—Dated 25th September, 1861.

51,284. Morgan, Jay, Edwards, and Tilston, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in submarine telegraph and other cables, being also applicable to the rigging of vessels and other purposes."— Dated 24th September, 1861.—(English Patent, 25th March, 1861.)

51,285. Pacault, with Rey, of 47, Rue des Bourdonnais, Paris, for "A registering apparatus for public carriages."—Dated 24th September, 1861.

51,286. Paterson, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "A buckle or slide for fastening cravats, garters, braces, bracelets, ruffles, shoes, &c."—Dated 23rd September, 1861. —(English Patent, 24th May, 1861.)

51,287. Philippe, of 166, Rue de la Roquette, Paris, for "Porcelain garlands for tombs."—Dated 25th September, 1861.

51,288. Racin, of 3, Cité Bergerie, Paris, for "Manufacture of gas."—Dated 23rd September, 1861.

51,289. Spiquel, of 164, Rue St. Honoré, Paris, for "A process of punching rolled metals, &c."—Dated 25th September, 1861.

51,290. Taillandier, of 21, Rue de Bercy St. Antoine, Paris, for "A lift pump."—Dated 23rd September, 1861.

51,291. Veillard and Girard, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the manufacture of books, albums, &c."—Dated 26th September, 1861.

Certificates of Addition.

49,574. Barth, for "Buttons." — Dated 29th August, 1861.

46,842. Blondel and Barré, for "Paper-pulp."—Dated 5th September, 1861.

48,888. Bourbilla, for "Fastening letter bags."—Dated 30th August, 1861.

42,932. Camme, for "Feeding steam boilers."—Dated 29th August, 1861.

46,455. Carrin, for "A loom."—Dated 6th September, 1861.

46,969. Charbonnier, for "Sparkling wine."—Dated 5th September, 1861.

48,637. Curty, for "A pyrometer."—Dated 27th August, 1861.

43,128. Daragon, for "A hot-air stove heated by sand."—Dated 24th August, 1861.

46,747. De Cambeaux, for "A steam engine."—Dated 26th August, 1861.

40,842. Delavier, for "A coffee and tea pot."—Dated 22nd August, 1861.

49,870. Delonchant, for "A locomotive."—Dated 5th September, 1861.

48,062. DEMAEGT, for "Paper pulp."—Dated 24th August, 1861.

46,615. DENECHAUD and CHAPA, for "An electric controlling apparatus for railways."—Dated 21st August, 1861.

29,839. FLUHR, for "A loom."—Dated 30th August, 1861.

46,082. GARRES, jun., for "Preserved meat."—Dated 7th September, 1861.

33,056. GILLON, for "Lighting."—Dated 7th September, 1861.

37,609. GOUDENOVE, for "Shutting up gas."—Dated 28th August, 1861.

46,440. GUILLEMOT, for "A wet stamp."—Dated 22nd August, 1861.

47,171. HITCHCOCK and LARCHER, for "Engraved plates."—Dated 38th August, 1861.

48,139. JOBARD, for "Bricks and tiles."—Dated 30th August, 1861.

46,467. JOLY, for "Rasping beetroot."—Dated 24th August, 1861.

43,750. JOLY, for "Bagging beetroot."—Dated 24th August, 1861.

34,601. LACROIX, for "Preserving the aroma of coffee."—Dated 22nd August, 1861.

48,904. LAVERAT, for "A counter for billiard tables."—Dated 31st August, 1861.

47,781. LEPROVOST, for "Iron railway carriages."—Dated 9th September, 1861.

47,081. LERAS, for "A hot air stove."—Dated 22nd August, 1861.

48,783. LEROY, for "Elastic buffers for the feet of furniture."—Dated 23rd August, 1861.

50,003. MANOHA, for "A smoke consuming lamp."—Dated 7th September, 1861.

47,016. MARKLECBERG, for "A wet stamp."—Dated 3rd September, 1861.

48,755. MILLION, for "Heating by means of an exterior fire place."—Dated 24th August, 1861.

39,433. MONGIN, for "A saw."—Dated 26th August, 1861.

25,517. NEUSTADT, for "A crane."—Dated 30th August, 1861.

49,789. OUDRY, for "Suspension bridges."—Dated 22nd August, 1861.

48,167. PASCAL, for "A motor worked by inflammable gas."—Dated 17th August, 1861.

50,166. PIGEOT and CALTAUX, for "Bolts and nuts."—Dated 10th September, 1861.

46,541. POITIER, for "A thrashing machine."—Dated 3rd September, 1861.

34,634. QUINCHE, for "An irrigator."—Dated 30th March, 1861.

32,415. REBOLD, for "Electricity."—Dated 26th August, 1861.

49,824. SCHLOSS and Nephew, for "Envelopes."—Dated 17th August, 1861.

37,821. TAILLANDIER, for "A coffee machine, heated by spirits of wine."—Dated 26th August, 1861.

50,109. THETARD, for "An oil and grease box."—Dated 24th August, 1861.

34,135. BARRAU, for "A loom."—Dated 31st August, 1861.

30,730. BONTEMS, for "A self-acting bird."—Dated 4th September, 1861.

42,548. BOUCHARD, for "A gas furnace."—Dated 7th September, 1861.

47,732. BOUQUIE, for "Towing."—Dated 17th August, 1861.

48,350. BUGNIOT, Son, for "A pump for watering."—Dated 18th September, 1861.

41,675. CAMUS, GIBOIRE, and PETIT, for "Supports of rails."—Dated 5th September, 1861.

49,142. CASTENDET, for "Blinds."—Dated 4th September, 1861.

36,996. CHAUDET, for "Washing wool."—Dated 10th September, 1861.

50,123. CLÉMENT and CROZY, for "Expansion cocks."—Dated 4th September, 1861.

46,591. DEBRAS and BONGARD, for "A sewing machine."—Dated 4th September, 1861.

50,417. DELPIERRE, for "Half-boots."—Dated 7th September, 1861.

49,547. DENIS, for "Weaving furs."—Dated 13th September, 1861.

48,418. DUMONTHIER, for "A combined knife and penknife."—Dated 17th August, 1861.

31,555. DUPONT, for "Pistons of musical instruments."—Dated 4th September, 1861.

15,603. FINQUENEISEL, for "Seamless bags."—Dated 18th September, 1861.

41,935. FOSSEY, for "A blast engine."—Dated 16th August, 1861.

43,653. FOUBERT, for "Suspension carriages."—Dated 23rd August, 1861.

47,041. GROUSELLE and ANTHOINE, for "Caoutchouc bottles for the army."—Dated 14th August, 1861.

44,070. HUBLIER, for "A counter for carriages."—Dated 5th September, 1861.

46,723. LAFFITTE, for "An apparatus for writing music."—Dated 14th August, 1861.

47,238. LAPORTE and BARASTIER, for "A lamp."—Dated 1st August, 1861.

45,671. LATOUR DU MOULIN, for "A motor."—Dated 31st August, 1861.

46,755. LECOINTE, for "Pruning shears."—Dated 17th August, 1861.

46,724. LEMAIRE-DAIMÉ, for "A lathe."—Dated 5th September, 1861.

47,334. LOISEAU, for "Emptying cesspools."—Dated 17th August, 1861.

46,980. LOUVAT, for "A thrashing machine."—Dated 7th September, 1861.

44,365. MAHAUX, for "Ventilating mines."—Dated 24th June, 1861.

46,349. MARCEAU, for "A trap."—Dated 16t August, 1861.

48,720. Mattrais-Lhuissier, for "A pump."—Dated 14th September, 1861.

49,847. Migeot de Baran, for "Porcelain syphons."—Dated 4th September, 1861.

42,580. Mocomble and Comp., for "Smoothing irons."—Dated 12th August, 1861.

47,866. Pierrot, for "Hinges and hinge plates."—Dated 7th September, 1861.

48,565. Robert and Debonnaire, for "Paper-pulp."—Dated 20th August, 1861.

48,655. Samuel and Azou de Verrie, for "A wrench."—Dated 17th August, 1861.

49,794. Schloss and Nephew, for "A photographic album."—Dated 17th August, 1861.

49,511. Sickels, for "A machine for sewing leather."—Dated 16th August, 1861.

47,663. Trotry-Latouche Brothers, for "A felt hat."—Dated 3rd September, 1861.

50,625. Villeneuve, for "Photographic pictures.' —Dated 6th September, 1861.

47,670. Bernard, for "A pump." — Dated 25th September, 1861.

51,012. Borie, for "A portemonnaie."—Dated 7th September, 1861.

46,765. Bouneau, for "A counter for carriages."—Dated 11th September, 1861.

49,577. Buran, for "Disaggregation of phosphate." —Dated 17th September, 1861.

51,114. Colombi, Son, for "Observing microscopic objects."—Dated 11th September, 1861.

43,614. Counhaye and Vaurillon, for "A regulating smoke-consuming hot-air stove." — Dated 27th September, 1861.

48,387. Debons and Denny, for "Relief engravings on metals."—Dated 13th September, 1861.

48,488. Desponts, for "A diaphragm for photographic apparatus." — Dated 17th September, 1861.

49,619. Digney Brothers and Comp., for "Electrical telegraphs."—Dated 17th September, 1861.

49,873. Dumaine, for "An apparatus for twisting silk thread."—Dated 12th September, 1861.

44,899. Faivre, for "Escapement of pianos."—Dated 10th September, 1861.

47,889. Friedmann, for "Heating."—Dated 10th September, 1861.

51,054. Gatel, for "A photographic microscope." —Dated 14th September, 1861.

48,157. George, for "Frames."—Dated 10th September, 1861.

40,364. Gibus and Son, for "Hats."—Dated 10th September, 1861.

47,549. Giroud, for "A gas regulator."—Dated 25th September, 1861.

42,842. Guinier, for "A basin."—Dated 10th September, 1861.

36,612. Guinier, for "Cocks."—Dated 10th September, 1861.

50,546. Huguenin, for "So-called 'Personal snuff-boxes.'"—Dated 9th September, 1861.

50,899. Janson, son, for "An embroidering machine and comb for tambouring."—Dated 23rd September, 1861.

38,590. Lacroix, son, for "A variable propeller."—Dated 28th September, 1861.

48,496. Leterme, for "Organs." — Dated 11th September, 1861.

49,462. Lewandoski, for "Mixed thread."—Dated 18th September, 1861.

48,427. Lewandoski, for "Incrustation of boilers." —Dated 18th September, 1861.

50,612. Libotte, for "A grate of fire-places."—Dated 9th September, 1861.

41,881. Migeot de Baran, for "Stoppering syphons."—Dated 12th September, 1861.

48,755. Million, for "Heating by means of an exterior fire-place."—Dated 18th September, 1861.

42,043. Moison, for "A regulator of motors."—Dated 17th September, 1861.

49,815. Neaud, for "A press."—Dated 21st September, 1861.

50,361. Penet, for "Applying varnish to paper-hangings."—Dated 14th September, 1861.

47,784. Pinay, for "A bottle stand."—Dated 20th September, 1861.

50,943. Rousselot and Company, for "Separating metals."

46,762. Salmon, for "A compass."—Dated 25th September, 1861.

46,801. Thomas, for "A bedstead."—Dated 18th September, 1861.

44,759. Uhler, sen., for "An apparatus for registering and measuring liquids."—Dated 13th September, 1861.

44,212. Verdat du Trembley and Martin, for "A pneumatic break."—Dated 20th September, 1861.

50,336. Vigé, for "A smoking pipe with grates."—Dated 28th September, 1861.

47,504. Warker, for "Obtaining carbonic gas."—Dated 12th September, 1861.

56,834. Wattier-Guérin, for "A loom."—Dated 27th September, 1861.



HANOVER.*

List of Patents Delivered between the 1st October and 31st December, 1861.

(*Communicated by the Hanoverian Government.*)

(For previous List, see No. 817 of this Journal.)

1. Heinrich Fröhling, of Cologne, for "Manufacture of gas carburators."—5 years.—Dated 21st October, 1861.

2. Wilhelm Schulze, of Berlin, for "Manufacture of cylinder mangles with a peculiar mechanism for raising and lowering the pressing cylinders." 5 years.—Dated 21st October, 1861.

3. Paul Loewenberg, of Berlin, for "A process and apparatus for removing and reducing sulphuret of carbon or other volatile substances from bodies treated by means of the same in extracting grease and oils therefrom, and for recovering the sulphuret of carbon from said grease and oils."—5 years. —Dated 25rd November, 1861.

4. I. Neil, of Nienberg, for "A new process for the manufacture of chloride of lime and apparatus belonging thereto."—5 years.—Dated 24th November, 1861.

5. Edmund Thoder, of Dresden, for "An apparatus for pressing liquids from thick substances." —5 years.—Dated 25th November, 1861.

6. Friedrich Versmann, of London, for "A new process for the manufacture of pressed peat."—5 years.—Dated 4th December, 1861.

7. Antoine Nicolas Lesueur, of Paris, for "Improvements in assembling slabs, bricks, and tiles." —Dated 4th December, 1861.

8. Gärtner Theyson and Elbe, of Hanover, for 'Improvements in De Bary's cigar machine as patented 4th January, 1860."—5 years.— Dated 5th December, 1861.

9. Fritz and Theodor Hurtzig, of Linden, for "Manufacture of a white coloured hard substance from india rubber, gutta percha, and similar substances, as a substitute for ivory, bones, &c."— 5 years.—Dated 5th December, 1861.

10. Emil Langen, of Siegburg, for "A new apparatus for collecting the gases of blast-furnaces." —5 years.—Dated 5th December, 1861.

11. Carl Welckner, of Wietmarschen, for "A new apparatus for drying raw peat by applying heated atmospheric air in motion."—5 years.— Dated 6th December, 1861.

12. Carl Baumann, of Altdorf, for "Manufacture of a new kind of buttons."—5 years.—Dated 20th December, 1861.

13. I. M. Ottenheimer and Sons, of Stuttgart, for "Applying Goulliond's improvements in the construction of regulating cylinders of stay looms." 5 years.—Dated 23rd December, 1861.

14. Leopold Benze, of Neustadt on the Rhine, for "Improvements in his mode of using fire bricks in smoke consuming apparatus of fireplaces, as patented 22nd August, 1861."—5 years. Dated 27th December, 1861.

15. Julius Kizitaff, of Manchester, for "Manufacture of apparatus for superheating steam, applicable to boilers, the iron retorts being filled with spiral wire."—5 years.— Dated 27th December, 1861.

16. T. Meyer, of Hanover, for "An apparatus for increasing the illuminating power of common gaslights by means of peculiar fluids passing through."—5 years.—Dated 30th December, 1861.

17. Louis Piedbœuf, of Liége, for "A new system of pumps of mines with fixed pistons and moveable lift and force pipes."—5 years.—Dated 30th December, 1861.

* For the Hanoverian Patent Law, see No. 231 of the Journal.

COLONIAL PATENTS.—Information as to the Mode of obtaining Protection for Inventions in the Colonies; contained in Communications from the Governors, &c. of the different British Colonies in answer to the Application of Mr. W. J. Curtis for a Patent. Price 1*s*.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s*.

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List of Specifications published during the week ending 15th February, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
1702	10*d.*	Newton, W. E.—(*A communication from R. Rogers.*)—Engines for obtaining motive power, &c.
1703	3*d.*	Webster, J.—Compositions for lubricating railway and other axles.
1704	3*d.*	Wilson, T., and Tatters, J. G.—Treating tank refuse or soda waste.
1705	5*d.*	Mennons, M. A. F.—(*A communication from E. Blée.*)—Freezing and refrigerating apparatus.
1706	3*d.*	Sloper, B. G.—Amalgamating and separating gold from other matters.
1707	3*d.*	Fowler, B., the younger.—Sewer and sink trap.
1708	9*d.*	Hutson, J.—Cornices, laths, and panels for bedsteads.
1709	3*d.*	Williams, O.—Liquid for extinguishing fire, and rendering materials and fabrics uninflammable.
1710	3*d.*	Gedge, W. E.—(*A communication from Mons. Main-Guillon.*) — Obtaining motive power.
1711	9*d.*	De Pradou, J. E. M., and Lecoq, L. G.—Apparatus for lighting.
1712	1*s.* 2*d.*	Lakin, R., and Wain, J.—Preparing and spinning cotton, &c.
1713	3*d.*	England, W.—Bricks.
1714	6*d.*	Roughton, L.—Apparatus for extinguishing fires.
1715	7*d.*	Dean, J.—Propelling vessels.
1716	3*d.*	Black, J. R., and Spratt, H. W.—Manufacture of boxes, cases, tubes, rings, &c.
1717	3*d.*	Smith, R. A.—Purifying gas.
1718	10*d.*	Wilson, T.—Moveable spanners or screw wrenches.
1719	3*d.*	Reid, J. E.—Window sash fastener, &c.
1720	6*d.*	Schutt, H.—(*A communication from W. and T. Schmidt.*) — Spinning frames.
1721	3*d.*	Smith, T.—Bells.
1722	3*d.*	Pask, W.—Colouring matter.
1723	6*d.*	Ridsdale, J.—Inkstands, &c.
1724	3*d.*	Keily, L. A., and O'Doherty, W. A.—Grass-edge cutting apparatus.
1725	9*d.*	Farrow, C.—Apparatus for applying capsules to bottles, &c.
1726	3*d.*	Noble, A.—Obtaining products from alkali waste and gas lime refuse.
1727	7*d.*	Handcock, E. R.—Machinery for obtaining and applying motive power.
1728	3*d.*	Tutill, G.—Treating materials for the manufacture of banners and flags.
1729	3*d.*	Snider, J., junior.—Utilizing old or smooth bore cannon.
1730	3*d.*	Warner, F., and Clark, T.—Supplying water to waterclosets.
1731	1*s.* 7*d.*	Hornsby, R., junior.—Washing, wringing, mangling, and churning.
1732	3*d.*	Cobley, T.—Manufacture of fluo-silicates of lead and baryta, &c.
1733	11*d.*	Macneill, T. T.—Barometers, &c.
1734	3*d.*	Cobley, T.—Treating silicates, &c.
1735	10*d.*	Priest, A., and Woolnough, W.—Machinery for drilling and hoeing land.
1736	3*d.*	Parkinson, G. S.—Perforated materials.
1737	3*d.*	Penley, E. A.—Drawing boards.
1738	3*d.*	Barff, F. S.—Induration and preservation of stone, &c.
1739	5*d.*	Parkinson, W. C.—Frictionless bearing for gas meters.
1740	1*s.* 4*d.*	Keats, J., and Keats, G. E.—Sewing machinery.
1741	1*s.* 4*d.*	Cochrane, C.—Treating gas from blast furnaces, &c.
1742	1*s.* 4*d.*	Hornsby, R. junior.—Thrashing machines.
1743	5*d.*	German, J., and Browne, G. N.—Shampooing apparatus.
1744	4*s.* 9*d.*	Chellingworth, T. T., and Thurlow, J.—Traction engines.
1745	3*d.*	Cooke, W.—Wind guard for chimneys.
1746	3*d.*	Weston, G., and Weston, J.—Rotary steam engines and pumps.
1747	3*d.*	Adie, P.—Checks for railway buffers.
1748	3*d.*	Kidd, J.—Manufacture, &c. of gas.
1749	3*d.*	Salt, J. C. B.—Street plates, name plates, &c.
1750	1*s.* 7*d.*	Farron, J.—Apparatus and fittings connected with steam engines and boilers.
1751	8*d.*	Cotter, J. R.—Pianofortes.
1752	9*d.*	Reeves, T. junior.—Apparatus for applying salt, &c. to the roots of weeds.
1752	3*d.*	Wilkinson, W.—Ornamenting brushes, &c.
1754	5*d.*	Messenger, T. G.—Valves.
1755	1*s.* 1*d.*	Ashwell, H.—Apparatus for washing, &c.
1756	6*d.*	Smith, T. J.—Photographic albums.
1757	1*s.* 1*d.*	Adams, W. B.—Locomotive engines and trains.
1758	9*d.*	Adams, J.—Revolving fire-arms and cartridges for the same.
1759	3*d.*	Berchtold, S.—Perpetual calendars.
1760	3*d.*	Rydill, G.—Smoke consumer and condenser.
1761	9*d.*	De Rette, P. J.—Wind musical instruments.
1762	7*d.*	Maschwitz, C.—(*A communication from J. Berger.*)—Taps or stop-cocks.
1763	3*d.*	Beamish, I., and Beamish, N.—Lubricating steam engines.
1764	3*d.*	Pickering, J., Pickering, H., and Pickering, N.—Self-acting mules.
1765	3*d.*	George, L.—Printing type, &c.
1766	6*d.*	Tolhausen, F.—(*A communication from G. Duplay.*)—Looms for weaving ribbons, &c.
1767	10*d.*	Smith, T., and Taylor, G.—Horse rakes and cultivators, &c.
1768	3*d.*	Woycke, T.—Boots and shoes.

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VERZEICHNISS aller in ENGLAND von 1617—1854 incl. PATENTIRTEN ERFINDUNGEN, unter vielfältige Titel gebracht, mit Hinweisungen auf ERFINDUNGEN und ENTDECKUNGEN die nach Prof. Schubarth's Klassificirung in den wissenschaftlichen Werken VERSCHIEDENER NATIONEN beschrieben sind. Von B. Woodcroft.

Die hier aufgeführten fremden Werke machen einen Theil der Bibliothek der Patent Commission aus, allwo sie nachgeschlagen oder schriftliche Uebersetzungen besorgt werden können.

REPERTORIO di tutte le INVENZIONI munite di LETTERE PATENTI in INGHILTERRA dal 1617—1854 inclusivo, poste in ordine sotto il piu gran numero di capi, con riferenze alle INVENZIONI e SCOPERTI descritti nelle opere scientifiche di DIVERSE NAZIONI, classate dal Professore Schubarth. Dal Sig. B. Woodcroft.

Le opere straniere quì indicate possono esser consultate nella Biblioteca dei Commissari delle Patenti e traduzioni in manuscritto vi possono ottenersi.

B. WOODCROFT,
Superintendent of Specifications, &c.

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Nottingham (*Corporation Rooms, St. Peter's Church side*).
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NUMBER of VISITORS for the Week ending 15th February, 1862, 4,132.

Since the opening of the Museum Free Daily (May 12, 1858,)—481,189.

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This change will meet the convenience of a large class of engineers, machinists, and others, who in the year 1858 memoralized the Commissioners of Patents for the opening of the Patent Museum on Saturday evenings, a request with which the Commissioners of Patents regretted their inability to comply, owing to difficulties suggested by the Authorities at the South Kensington Museum.

All communications on the subject of the Museum to be addressed to the Superintendent,

B. WOODCROFT.

Great Seal Patent Office,
Southampton Buildings.

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The following are in the press:—

PREPARATION OF FUEL, AND APPARATUS FOR ITS COMBUSTION.
STEAM ENGINES.

B. WOODCROFT.

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No. 849. FRIDAY, FEBRUARY 21, 1862. Price 2d.

Applications for Letters Patent.

(18*th*, 19*th*, *and* 20*th February*, 1862.)

426. Henry Ebenezer Quant and George Henry Fisk, of No. 1, High Street, Manchester, in the county of Lancaster, Merchants, and William Dawes, of Bolton, Lancaster, Engineer, for an invention of "Improvements in securing the ends of steel or other materials used for crinolines."—Dated 18th February, 1862.

427. John Henry Hastings and James Freezer, of Holkham, and John Woods, junior, of Wells, all in the county of Norfolk, for an invention of "Improvements in ploughs."—Dated 18th February, 1862.

428. Richard Watkins, of 14, Lower Belgrave Place, Pimlico, London, for an invention of "Improvements in producing light in oil and spirit lamps, parts of which improvements are applicable to lamps generally."—Dated 18th February, 1862.

429. Charles Denis Ségoffin, of 2, Rue Sainte-Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention of "An improved apparatus for looking at photographic cards 'microphore.'"—Dated 18th February, 1862.

430. John Lees, of the Rookery, Salterhebble, near Halifax, in the county of York, for an invention of "An improved trap for catching rats, mice, birds, and other animals alive."—Dated 18th February, 1862.

431. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in gas apparatus used for lighting cigars and other tobacco."—A communication to him from abroad by Mr. Pierre Duchamp, of 29, Boulevart St. Martin, Paris, Merchant.—Dated 18th February, 1862.

432. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in cartridges."—A communication to him from abroad by Jules Lemoine, of 34, Rue Saint Paul, Paris, France, Chemist."—Dated 18th February, 1862.

433. William Bush, of Tower Hill, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in omnibuses and other carriages."—Dated 18th February, 1862.

434. William Firth, of Burley, in the borough of Leeds, in the county of York, Merchant, for an invention of "Improvements in machinery for digging or turning up soil."—Dated 18th February, 1862.

435. Charles Thomas Marzetti and John Watson, of Vine Street, Minories, E C., for an invention of "Machinery or apparatus for raising, lowering, and otherwise moving or disposing casks and other heavy bodies."—Dated 19th February, 1862.

436. John Tomlinson Pendlebury, Blacksmith, of Elton, near Bury, in the county of Lancaster, and George Pendlebury, Maker-up, of Tottington-lower-end, in the said county, for an invention of "Improvements in machinery for doubling, folding, or plaiting cloth."—Dated 19th February, 1862.

437. Henry Bernoulli Barlow, of the city of Manchester, Patent Agent, for an invention of "Improvements in carding or otherwise preparing cotton and other fibrous materials and in machinery employed therein."—A communication to him from abroad by Sixte Pierre Villain, of Paris, in the empire of France, Engineer.—Dated 19th February, 1862.

438. James Nasmyth, of 31, Rue de l'Etoile, Brussels, in the kingdom of Belgium, Civil Engineer, for an invention of "Improvements in the method of obtaining motive-power and of applying it."—Dated 19th February, 1862.

439. Frederic Barnett, residing at 230, Oxford Street, London, for an invention of "An improved lamp or lantern for street lighting and other purposes."—Dated 19th February, 1862.

440. William Bridges Adams, of Holly Mount, Hampstead, in the county of Middlesex, Engineer, for an invention of "Improvements in springs and their arrangement for moving and stationary purposes."—Dated 19th February, 1862.

441. Nathaniel Symons, Iron Founder, of No. 6, Cambridge Street, St. Pancras, London, Middlesex, for an invention of "Improving the power of steam-engines by a different form of piston, internal top and bottom of cylinders, also for increased strength and lightness for all kinds of wheels, framework girders, blades of blowing fans, and paddle wheels."—Dated 19th February, 1862.

442. James Turner, of 194, Upper Thames Street, in the city of London, Baker, for an invention of "Improved machinery for mixing, mincing, and pounding."—Dated 19th February, 1862.

443. William Hinton, of Greville Street, Holborn, in the county of Middlesex, Barometer Manufacturer, for an invention of "Improvements in barometers."—Dated 19th February, 1862.

444. William Davis, of Spencer Road, Stoke Newington, in the county of Middlesex, Oil Refiner, for an invention of "Improvements in increasing the illuminating effect of coal gas and other gases."—Dated 19th February, 1862.

445. James Paterson, of the Middle Temple, in the county of Middlesex, Barrister-at-Law, for an invention of "Improvements in means or apparatus for re-burning animal charcoal."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada East.—Dated 19th February, 1862.

446. Joseph Gregory, of Wellington, in the county of Somerset, for an invention of "Improvements in candlesticks."—Dated 19th February, 1862.

447. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improved modes of protecting iron boilers, tanks, and vats from wear arising from galvanic action."—A communication to him from abroad by John Welton Wilcox, a person resident at West Roxbury, in the county of Norfolk and state of Massachusetts, in the United States of America.—Dated 19th February, 1862.

448. James Wilcox, of Ludgate Hill, in the city of London, Sewing Machine Manufacturer, for an invention of "Improvements in the manufacture of frills or ruffles, and in the machinery or apparatus employed therein."—A communication to him from abroad by Chauncey Orrin Crosbey, of New Haven, Connecticut, United States of America.—Dated 19th February, 1862.

449. George Frederick Lee, of New Bridge Street, in the city of London, Solicitor, for an invention of "An improvement in tourniquets."—A communication to him from abroad by Thomas Scott Lambert, of New York, in the United States of America.—Dated 20th February, 1862.

450. Joseph Friedlaender, of White Abbey, in the county of Antrim, Ireland, Civil Engineer, for an invention of "Improvements in machinery for scutching, breaking, and preparing flax, hemp, jute, and other fibrous substances."—Dated 20th February, 1862.

451. Emil Moritz Stochr, of the city of Manchester, for an invention of "Improvements in the manufacture of manganese, and in the combinations of manganese with other metals."—A communication to him from abroad by Oscar E. Prieger, Doctor of Medicine, and Ferdinand Carl Prieger, both of Schloss, Gereath, near Ebern, in the kingdom of Bavaria.—Dated 20th February, 1862.

452. David Wilkie, of No. 15, Great Hermitage Street, Wapping, E., for an invention of "A ship's compass, which is not to be affected by local attraction or deviation, to be used by sailing vessel or steamer."—Dated 20th February, 1862.

453. Joseph Bleasdale, Roller Manufacturer, and Frederick William Borland, Mechanic, both of Accrington, in the county of Lancaster, for an invention of "Improvements in fluted rollers for preparing and spinning fibrous materials and in the mode of manufacturing the same."—Dated 20th February, 1862.

454. Robert Taylor Pritchett, of Saint James' Street, in the city of Westminster, Gun Manufacturer, for an invention of "Improvements in targets or butts."—Dated 20th February, 1862.

455. James Paterson, of the Middle Temple, in the county of Middlesex, Barrister-at-Law, for an invention of "Improvements in the use of animal charcoal."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada, East.—Dated 20th February, 1862.

456. James Paterson, of the Middle Temple, in the county of Middlesex, Barrister-at-Law, for an invention of "Improvements in means or apparatus for facilitating the evaporation of saccharine solutions."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada, East.—Dated 20th February, 1862.

457. Charles Wood, of Bramford, in the county of Suffolk, Engineer, for an invention of "Improvements in horse rakes."—Dated 20th February, 1862.

458. Lord Alfred Spencer Churchill, of No. 16, Rutland Gate, Hyde Park, in the county of Middlesex, for an invention of "Improvements in electric telegraphs."—Dated 20th February, 1862.

Grants of Provisional Protection for Six Months.

NOTICE is hereby given that Provisional Protection has been allowed

2786. To HERMAN D. BRADT, of Boston, in the state of Massachusetts, of the United States of America, for the invention of "Certain new and useful improvements in machinery for lasting and pegging shoes."—A communication to him from John Taggart, a person resident at Roxbury, in the said state.

On his petition, recorded in the Office of the Commissioners on the 6th day of November, 1861.

136. To WILLIAM TICE, of 16, Downham Road Islington, in the county of Middlesex, for the invention of "Improvements in gas regulators and meters, part of which invention is also applicable for covering various descriptions of metal spindles."

On his petition, recorded in the Office of the Commissioners on the 18th day of January, 1862.

194. To CHARLES WEST, of 2, Derby Street, Westminster, London, and of Chateau Lehocq, Boulogne-sur-Mer, France, for the invention of "Improvements in the insulation and covering of wire, and in the preparation of the materials for insulating the same."

On his petition, recorded in the Office of the Commissioners on the 25th day of January, 1862.

236. To JAMES BENJAMIN HARBY, of Leytonstone in the county of Essex, Rope Maker, for the invention of "An improved method of preserving electric telegraph cables and wires."

On his petition, recorded in the Office of the Commissioners on the 29th day of January, 1862.

262. To PIERRE SCHEURWEGHS, Distillator, and ALEXANDRE JOSEPH AURELE HENRY DE BOISSEROLLE, Manufacturer, both of Paris, in the French empire, for the invention of "Certain improvements in treating fatty and oily matters for obtaining their acidification, and in the apparatus employed therein."

On their petition, recorded in the Office of the Commissioners on the 31st day of January, 1862.

272. To JONATHAN PENDLEBURY, of Dukinfield, in the county of Chester, Engineer, for the invention of "Improvements in the method of, and apparatus for, lubricating steam engine cylinders, slides, and other surfaces."

274. And to JOSEPH DEPREZ, of Anzin, in the department du Nord, in the empire of France, Engineer, for the invention of "Improvements in machinery or apparatus for extracting coal, ores, and other mineral substances from mines."

On both their petitions, recorded in the Office of the Commissioners on the 1st day of February, 1862.

238. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in processes for preserving and colouring wood, denominated xylochromic and xyloplastic processes."—A communication to him from abroad by Messieurs Heinrich Sperl, Doctor, Richard Hogen, and Wolfgang Springer, of Nuremberg, Bavaria, representatives of the Xylochromic and Xyloplastic Product Company, of same place.

On his petition, recorded in the Office of the Commissioners on the 3rd day of February, 1862.

292. To PAUL GARDILANNE, of Dax, in the department of the Landes, in the empire of France, Gentleman, for the invention of "Improvements in the manufacture of metallic wire fencing."

294. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in the manufacture of hard and soft soaps, and in the preparation of liquids for washing linen and other textile fabrics."—A communication to him from abroad by Léo Bachellerie, of Paris, France.

296. And to WELBURN WILKS WILLIAMSON, of High Holborn, in the county of Middlesex, Mechanical Engineer, for the invention of "Improvements in apparatus for drying clothes and fabrics."

On their several petitions, recorded in the Office of the Commissioners on the 4th day of February, 1862.

306. To WILLIAM CAMPION and HENRY JOHNSON, both of the town and county of the town of Nottingham, Sewing and Stitching Machine Manufacturers, for the invention of "Improvements in machinery or apparatus for making the welts of hose or other articles made of looped or knitted fabrics, applicable also for other purposes."

On their petition, recorded in the Office of the Commissioners on the 5th day of February, 1862.

322. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in stereoscopic albums, books, and cases."—A communication to him from abroad by Louis François Saugrin, of Paris, France.

324. To PETER SHAW, of the city of Edinburgh, Gentleman, for the invention of "Improvements in lamps."

326. To WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for the invention of "An improved portable thrashing and winnowing machine and apparatus for working same by horse power."—A communication to him from abroad by Alexandre François Serrin, of No. 15, Passage des Petites Ecuries, Paris, France.

328. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in preserving timber, which are particularly applicable to the timbers of ships or other maritime structures."—A communication to him from abroad by Mr. Henri De Lapparent, of 29, Boulevart St. Martin, Paris, in the empire of France, Director of Naval Constructions.

330. And to WILLIAM HAMOND BARTHOLOMEW, of 2, Warwick Villas, Leeds, in the county of York, for the invention of "Improvements in barges or vessels suitable for the navigation of canals and rivers."

On their several petitions, recorded in the Office of the Commissioners on the 7th day of February, 1862.

332. To JOHN SENIOR WOODHOUSE, of Cheapside, in the city of London, Warehouseman, for the invention of "Improvements in hooped skirts."

336. And to JAMES WEBSTER, of Birmingham, in the county of Warwick, Engineer, for the invention of "An improvement or improvements in the manufacture of certain descriptions of nails, bolts, spikes, and pins."

On both their petitions, recorded in the Office of the Commissioners on the 8th day of February, 1862.

338. To MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improvements in the treatment of coprolites and other fossil phosphates of lime."—A communication to him from Guillaume Louis Edouard Buran and Louis Goupy, persons resident at No. 17, Rue du Grand St. Michel, Paris, France.

340. To JAMES DICKSON, of 66, Tollington Road, Holloway, in the county of Middlesex, Gentleman, for the invention of "Improvements in voltaic apparatus and in the production of voltaic electricity."

342. To JOHN BUSFIELD, of Bradford, in the county of York, Worsted Spinner, and JONATHAN EASTWOOD, of the same place, Machine Maker, for the invention of "Improvements in machinery or apparatus for preparing wool for dyeing and spinning."

344. To LOUIS RUDOLPH BODMER, of 2, Thavies Inn, in the city of London, for an invention of "Improvements in hydraulic oil presses."

346. To JOSHUA DANKS, of 56, Webber Row, Waterloo Road, in the county of Surrey, Mat and Matting Manufacturer, for the invention of "Improvements in the manufacture of door mats and hearth rugs."

348. And to ANTHONY MUNCK, Master Mariner, and HELGE AUGUST MYHRE, Watchmaker, both of Berners Street, Oxford Street, in the county of Middlesex, for the invention of "Improvements in ships' logs."

On their several petitions, recorded in the Office of the Commissioners on the 10th day of February, 1862.

352. To CORNELIUS BONELL, of Wednesbury, in the county of Stafford, Engineer, and WILLIAM MORTIMER SPIRING, of Wednesbury aforesaid, Engineer, for the invention of "A new or improved rotary engine."

354. To WILLIAM MACNAB, of Greenock, in the county of Renfrew, North Britain, Engineer, for the invention of "Improvements in steam engines."

362. And to FRANCIS JOHN BOLTON, of 7, Bolton Row, Mayfair, in the county of Middlesex, Captain in H.M.'s 12th Regiment of Foot, for the invention of "Improvements in rifle and gun stoppers and oil bottles."

On their several petitions, recorded in the Office of the Commissioners on the 11th day of February, 1862.

368. To THOMAS COLTMAN, of Leicester, Machinist, for the invention of "Improvements in sewing machines."

372. To THOMAS SPENCER, of Liverpool, in the county of Lancaster, Engineer, for the invention of "Improvements in propellers for navigable vessels, and engines for actuating the same, parts of which are applicable to other purposes."

374. And to THOMAS HORSLEY, junior, of 10, Coney Street, York, Gun Maker, for the invention of "Improvements in breech-loading fire-arms."

On their petition, recorded in the Office of the Commissioners on the 12th day of February, 1862.

380. To WILLIAM HEWITT, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "Improvements in rein holders."

382. To WILLIAM HENRY BROWN, of Camberwell, in the county of Surrey, Paymaster, Royal Navy, for the invention of "An improvement in yards, fore and aft booms, and gaffs."

386. To JOSEPH FEARNS LAWTON and JOHN LAWTON, of Vale Mill, Micklehurst, near Stalybridge, in the county of Cheshire, for the invention of "Improvements in the manufacture of flannel for shirtings and other articles of apparel."

388. To WILLIAM DANIEL ALLEN, of Laithfield House, Norfolk Road, Sheffield, for the invention of "Improvements in the manufacture of stamp heads and beds employed in crushing ores and other mineral substances."

390. To EDWARD ELLIS ALLEN, of 5, Parliament Street, in the county of Middlesex, Engineer, and JOHN STEWART, of Blackwall, in the county of Middlesex, Engineer, for the invention of "Improvements in the construction of steam-engines."

392. To EDWIN GREEN, of the firm of Green and Cadbury, Button Manufacturers, of Birmingham, in the county of Warwick, and JAMES NEWMAN, Jeweller, also of Birmingham aforesaid, for the invention of "Certain improvements in buttons for fastening and ornamenting articles of dress."

394. And to ADOLPHUS JANSEN, of Brussels, in the kingdom of Belgium, Arquebusier, for the invention of "A new ball for fire-arms."

On their several petitions, recorded in the Office of the Commissioners on the 13th day of February, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given that the petition of

378. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, praying for Letters Patent for the invention of "Improvements in the disinfection of animal excretions, and in the extraction therefrom of fertilizing elements for agricultural purposes,"—a communication to him from Alfred Marie Celestin Edgard Goussard, a person resident at No. 16, Rue d'Enghien, Paris, France,—was deposited and recorded in the Office of the Commissioners on the 13th day of February, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

21st February, 1862.

2115. Jeremiah Driver, of Keighley, in the county of York, Iron Founder, and Joseph Jessop, of Bradford, in the same county, Machine Maker, for an invention of "Improvements in means or apparatus employed in washing, wringing, and mangling fabrics, and in the manufacture of part or parts of such apparatus."—Dated 24th August, 1861.

2118. Henry Bentinck Coathupe, of the Junior United Service Club, St. James's, in the county of Middlesex, Esquire, for an invention of "Improvements in timekeepers." — Dated 24th August, 1861.

2123. George Nye, of No. 18, Mount Street, Lambeth, in the county of Surrey, Surgical Instrument Maker, for an invention of "Improvements in apparatus for administering injection in a continuous stream, also applicable as an eye douche and other purposes."—Dated 26th August, 1861.

2124. Auguste Lechêne, of 9, Stanhope Street, Hampstead Road, in the county of Middlesex, and Charles Nathan, of 17, Westmoreland Street, Pimlico, in the same county, for an invention of "Improvements in the manufacture of ladies' collars, cuffs, or other ornamental articles for dress or furniture to imitate such articles made of lace or embroidery." — Dated 26th August, 1861.

2126. Frederick Tolhausen, Civil Engineer and Patent Agent, of No. 35, Boulevart Bonne Nouvelle, Paris, in the empire of France, for an invention of "A new kind of artificial fur to be made by means of the Jacquard or other loom with silk or other textile material."—A communication from Antoine Denis and Adolphe Mottet, two persons resident at No. 35, Boulevart Bonne Nouvelle, Paris, France.—Dated 26th August, 1861.

2130. Henry Attwood, of Wapping Wall, in the county of Middlesex, Engineer, for an invention of "Improvements in cleansing and in feeding boilers."—Dated 26th August, 1861.

2135. John Christopher Caesar Azémar, of 40, Mark Lane, in the city of London, for an invention of "The manufacture of an instrument to facilitate the practice of the drum."—Dated 27th August, 1861.

2140. Arthur Granger, of Holborn, in the county of Middlesex, Stationer, for an invention of "Improvements in the manufacture of shirt collars, and fronts, wristbands, or cuffs, neck-ties, or other similar articles of wearing apparel."—Dated 28th August, 1861.

2148. Samuel Corbett, of Park Street Works, Wellington, in the county of Salop, Agricultural Implement Manufacturer, for an invention of "Improvements in mills for crushing and grinding mineral and vegetable substances, and for hulling or shelling beans and oats and other grain and seeds."—Dated 29th August, 1861.

2166. James Bishop, of No. 1A, Gloucester Street, Camden Town, in the county of Middlesex, Gentleman, for an invention of "Improvements in the manufacture or weaving of velvet or pile fabrics made entirely or partially of silk, and in looms used for that purpose."—Dated 30th August, 1861.

2174. Charles Pemberton, of Deptford, in the county of Kent, Engineer, for an invention of "Improvements in railway, ship, and other signals."—Dated 31st August, 1861.

2186. William Müller, of 62, High Holborn, in the county of Middlesex, Artist's Colorman, for an invention of "Improvements in apparatus for roasting coffee, which improvements are also applicable to the roasting of cocoa and other vegetable matters."—Dated 2nd September, 1861.

2244. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in the construction of saddles."—A communication to him from abroad by Mr. Louis Friese, of Stuttgard, in the Kingdom of Wurtemberg.—Dated 7th September, 1861.

2262. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in needles."—A communication to him from abroad by Thomson Hankey Alexander, of Washington city, in the district of Columbia, in the United States of America.—Dated 12th September, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 19th February*, 1862, *inclusive.*)

17th February.

497. George Turnbull, of Calcutta, in the province of Bengal, in the East Indies, Civil Engineer, for an invention of "Improvements in the permanent way of railways."—Dated 23rd February, 1859.

18th February.

490. Samuel Ridge, of Hyde, in the county of Chester, Millwright, for an invention of "Improvements in coupling or making the joints of pipes and other articles."—Dated 23rd February, 1859.

512. Charles William Siemens, of John Street, Adelphi, in the county of Middlesex, for an invention of "Improvements in electric telegraphs and apparatus, and in supports for electric telegraphic line wires."—Partly a communication from Werner Siemens, residing at Berlin, in Prussia.— Dated 25th February, 1859.

19th February.

491. William Ashton, of Heaton Norris, in the county of Lancaster, Manager, for an invention of "Improvements in gas regulators."—Dated 23rd February, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 19th February*, 1862, *inclusive.*)

18th February.

431. Alexander Theophilus Blakely, of Little Ryder Street, St. James's, in the county of Middlesex, Captain of the Royal Artillery, for an invention of "Improvements in ordnance."—Dated 27th February, 1855.

19th February.

386. Frederic Prince, of No. 3, South Parade, Chelsea, in the county of Middlesex, for an invention of "Improvements in fire-arms and ordnance."—Dated 21st February, 1855.

FOREIGN and COLONIAL PATENT LAWS and RULES, being translations or copies of Official Communications, may be found in the following Numbers of this Journal, published at 2*d.* each, or 3*d.* free by post:—

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New South Wales, No. 386.
Norway, No. 665.
Prussia, Nos. 313 and 329.
Parma, Piacenza, and Guastalla, No. 321.
Portugal, No. 325.
Poland, No. 335.
Roman States, No. 319.
Russia, Nos. 334 and 508.
Sardinia, Nos. 233, 235, 636, 637, 639, and 640.
Saxony, No. 236.
Sicilies (the Two), No. 316.
Spain, No. 323.
Sweden, Nos. 327 and 354.
United States of America, Nos. 638, 646, and 789.
Victoria, Nos. 186 and 359.
Wurtemberg, No. 314.

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No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March „
268	„ April to June „
291	„ July to September „
321	„ October to December „
345	A.D. 1854—January to March „
371	„ April to June „
399	„ July to September „
424	„ October to December „
451	A.D. 1855—January to March „
475	„ April to June „
505	„ July to September „
527	„ October to December „
553	A.D. 1856—January to March „
579	„ April to June „
605	„ July to September „
632	„ October to December „
660	A.D. 1857—January to March
684	„ April to June „
712	„ July to September „
737	„ October to December „
761	A.D. 1858—January to March „
789	„ April to June „
815	„ July to September „
842	„ October to December „

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660	A.D. 1853—January to March „
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712	„ July to September „
737	„ October to December „
761	A.D. 1854—January to March „
789	„ April to June „
815	„ July to September „
842	„ October to December „

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COLONIAL PATENTS.

VICTORIA.*

LIST of LETTERS PATENT issued between the 25th September and 25th December, 1861.

NOTE.—The consecutive number shows how many Patents have been issued in the colony; and the chronological number the order in which the Specifications have been lodged.

(For previous List, see No. 823 of this Journal.)

322. JOSEPH MEREDITH, of Castlemaine, for "Certain improvements in amalgamating metals"—Dated 28th July, 1859.—Chron. No. 239 (419).

323. ENOCH CHAMBERS, of Melbourne, for "A new method of raising minerals and other matters from mines."—Dated 1st October, 1860.—Chron. No. 391 (420).

324. GEORGE HUMPHREY and EDMOND SHEPHEARD, of Smythesdale, for "An invention for the extraction of gold from auriferous earths and pulverized quartz, by a system of amalgamation by a moderate temperature, and a simple and inexpensive application of machinery."—Dated 8th April, 1861.—Chron. No. 441 (421).

325. JOHN RILLSTONE, of Sandridge, for "Improvements in machinery for crushing quartz and other analogous substances, and for other purposes."—Dated 17th April, 1861.—Chron. No. 444 (422).

326. THOMAS CARPENTER, of Melbourne, for "An invention for extracting gold from quartz or other auriferous substances."—Dated 17th April, 1861.—Chron. No. 445 (423).

327. FREDERIC EVANS, of Maldon, for "Evans' crushing and amalgamating stamper box."—Dated 6th June, 1861.—Chron. No. 466 (424).

328. GODFREY WILLIAM PRAAGST, of Williamstown, for "Improvements in the manufacture of vegetable gas for illuminating purposes."—Dated 1st August, 1861.—Chron. No. 481 (425.)

329. RICHARD DAY FORD, of Melbourne, for "An invention for making a hat of extreme lightness and peculiar suitability for summer wear, possessing the property of resisting the rays of the sun, and also an improved method of carrying off the moisture of the head occasioned by heat, and which will admit of being frequently washed without injury."—Dated 15th August, 1861.—Chron. No. 485 (426).

330. ENOCH CHAMBERS, of Melbourne, for "An invention for the use of hydraulic power for breaking, crushing, or pulverizing quartz, bluestone, or other stone or mineral of any description, and the use of a wrought iron lever or jaw in machines for crushing quartz or any other material, and the use of steel teeth and steel shield pieces for the levers or jaws in such machines."—Dated 16th August, 1861.—Chron. No. 486 (427).

331. SAMUEL RENTSCH, of Melbourne, and JOHN REIGG, of Altstaedten, Canton Saint Gall, Switzerland, for "An invention for planing stone."—Dated 18th July, 1861.—Chron. No. 477 (428).

* For the Victorian Patent Law, see Nos. 186 and 359 of this Journal.

332. JOSEPH MEREDITH, of Yapeen, near Castlemaine, in the county of Talbot, for "Improvements in washing and amalgamating gold from pulverized quartz, debris, sludge, and other auriferous earthy matters."—Dated 10th September, 1861.—Chron. No. 492 (429).

FOREIGN PATENTS.

BELGIUM.*

LIST of PATENTS of INVENTION Delivered on the 15th February, 1862.†

(*Communicated by the Belgian Government.*)

(For previous List, see No. 847 of this Journal.)

12,042. H. DAUTREBANDE and F. THIRY, of Huy, for "A double action pulp strainer."—Dated 24th January, 1862.

12,043. E. DUNESME, of Braine-le-Comte, a Patent of Improvement for "A regulator of motors."——Dated 24th January, 1862.—(Original Patent, 28th January, 1860.)

12,044. E. DUNESME, of Braine-le-Comte, for a Patent of Improvement for "An alarum apparatus for signalling at once the overheating of a journal."—Dated 24th January, 1862.—(Original Patent, 21st March, 1861.)

12,045. ED. DE RYCKERE, of Courtrai, for "A kind of corrugated tiles."—Dated 25th January, 1862.

12,046. CH. VAN HAM and J. STORDIAU, of Antwerp, for "Granaries for preserving corn and seeds."—Dated 25th January, 1862.

12,047. T. J. G. STEPPE, of Brussels, for "Improvements in lace-work in general."—Dated 21st January, 1862.

12,048. T. J. G. STEPPE, of Brussels, for "Improvements in the manufacture of transparent lace curtains."—Dated 21st January, 1862.

12,049. T. J. G. STEPPE, of Brussels, for "A kind of lace embroideries."—Dated 21st January, 1862.

12,050. E. G. DE KERCHOVE, of Ixelles, for "Preserving cakes or residues of oil seeds and products."—Dated 21st January, 1862.

12,051. L. BARBAT, represented by X. Raclot, of Brussels, for an imported invention of "Improve-

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

ments in the manufacture of hats and head coverings in general."—Dated 21st January, 1862.—(French Patent, 11th January, 1862.)

12,053. G. Bottomley, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in machines for cutting substances used in the manufacture of paper."—Dated 21st January, 1862.—(French Patent, 14th December, 1861.)

12,054. E. Grangier, of St. Josse-ten-Noode, for "Economical iron and wooden supports on railways."—Dated 23rd January, 1862.

12,055. G. F. Griffin, represented by P. Bals, of Brussels, for an imported invention of "Improvements in the permanent way of railroads."—Dated 23rd January, 1862.—(English Patent, 23rd July, 1861.)

12,056. J. Higgins and T. S. Whitworth, represented by H. Biebuyek, of Brussels, for an imported invention of "Improvements in apparatus for spinning and doubling cotton and other fibrous substances."—Dated 23rd January, 1862.—(English Patent, 26th June, 1861.)

12,057. J. Lecointe, represented by E. Lecointe, of Brussels, a Patent of Improvement for "A system of injection and distribution of hydraulic pressure in sugar presses."—Dated 24th January, 1862.—(Original Patent, 25th July, 1861.)

12,058. A. Callès, of Ixelles, for "Motive power."—Dated 24th January, 1862.—(Original Patent, 23rd December, 1861.)

12,059. P. Beckers, of Molenbeek St. Jean, for "Manufacture of anvils of wrought iron without welding."—Dated 25th January, 1862.

12,060. Th. Agudio, represented by W. H. Kirkpatrick, of Ixelles, for "A funicular locomotive for railways."—Dated 25th January, 1862.

12,061. D. Evans, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in the manufacture of wheels of railway carriages."—Dated 25th January, 1862.—(English Patent, 21st February, 1861.)

12,062. W. Wilkinson, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in embellishing and ornamenting metals, porcelain, glass, parchment, &c."—Dated 25th January, 1862.—(English Patent, 11th January, 1862.)

12,063. J. Schärrer, of Arlon, for "A stove for heating apartments and cooking food by means of a clay or metal instrument."—Dated 25th January, 1862.

12,064. R. Malherbe, of Charleroi, a Patent of Improvement for "Miners' cages with a direct traction and cranks without beams."—Dated 28th January, 1862.—(Original Patent, 5th December, 1861.)

12,065. A. Sommerville, represented by X. Raclot, of Brussels, for "A box for steel pens."—Dated 27th January, 1862.

12,066. Ph. Piette, of Brussels, for "A carriage for children."—Dated 27th January, 1862.

12,067. A. Couvreux and L. Combe, represented by H. Biebuyek, of Brussels, for an imported invention of "Improvements in cranes with moveable masts."—Dated 27th January, 1862.—(French Patent, 24th January, 1862.)

12,068. R. O. Doremus and B. L. Budd, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of cartridges."—Dated 27th January, 1862.—(English Patent, 20th January, 1862.)

12,069. F. Dumeny and F. Lemut, represented by H. Biebuyek, of Brussels, for an imported invention of "A puddling apparatus."—Dated 27th January, 1862.—(French Patent, 24th August, 1861.)

12,070. P. A. Samuel, represented by O. Daillencourt, of Brussels, for an imported invention of "A self-acting apparatus for feeding steam generators."—Dated 27th January, 1862.—(French Patent, 7th June, 1860.)

12,071. P. N. Fonget, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in fire-arms."—Dated 27th January, 1862.—(French Patent, 7th October, 1861.)

12,072. P. Gondolo, represented by O. Daillencourt, of Brussels, a Patent of Improvement for "A kneading machine."—Dated 27th January, 1862.—(Original Patent, 29th May, 1861.)

12,073. P. Ganidel, of Liége, a Patent of Improvement for "Manufacture of acierated rails without welding."—Dated 25th January, 1862.—(J. B. Delrieu's Original Patent, 23rd April, 1861.)

12,074. J. B. Von Rymenant, represented by X. Raelot, of Brussels, for "An expeditious mode of tanning hides with their hair on."—Dated 28th January, 1862.

12,075. A. Forët and P. Kieffer, represented by F. Bazin, of St. Josse-ten-Noode, for an imported invention of "Bricks for the manufacture of gas retorts."—Dated 28th January, 1862.—(French Patent, 26th November, 1861.)

12,076. Ad. Jansen, of Brussels, a Patent of Improvement for "Balls for smooth or rifled fire-arms."—Dated 29th January, 1862.—(Original Patent, 30th December, 1861.)

12,077. R. Thompson, represented by D. De Vos-Verraert, of Brussels, for an imported invention of "Improvements in machines for cutting wood and other substances by means of rotary blades."—Dated 29th January, 1862.—(English Patent, 23rd July, 1861.)

12,078. J. J. Vanden Berg, represented by H. Biebuyek, of Brussels, for an imported invention of "Economical fire-wood."—Dated 29th January, 1862.—(Dutch Patent, 2nd January, 1862.)

12,079. L. Coignard, represented by A. Crooy, of Brussels, for "Combinations and means for obtaining hydraulic power."—Dated 29th January, 1862.

12,080. Alf. Sudre, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in furnaces for smelting steel."—Dated 29th January, 1862.—(French Patent, 29th November, 1861.)

12,081. J. N. T. Jacquot, of Dottignies Courtrai, for "A moveable mechanical saw."—Dated 30th January, 1862.

12,082. L. Simon, of Châtelet-Charleroi, for "Improvements in water twyers."—Dated 30th January, 1862.

12,083. G. Vanlair, of Liége, for "Billiard tables."—Dated 30th January, 1862.

12,084. J. Vanden Branden, of Liége, for "Chemical oil for protecting metals from oxidation."—Dated 31st January, 1862.

12,085. J. B. Ledent, of Liége, for "An apparatus for brushing and polishing foot-coverings."—Dated 31st January, 1862.

12,086. S. Gérard, of Liége, a Patent of Improvement for "A compass for miners."—Dated 31st January, 1862.—(Original Patent, 10th October, 1860.)

12,087. P. J. Hardy, represented by J. Lejeune, of Verviers, for an imported invention of "An armchair with moveable pieces."—Dated 31st January, 1862.—(American Patent, 20th August, 1861.)

12,088. J. B. M. A. Siry, represented by A. Calvet, of Brussels, for an imported invention of "Bleaching textile substances used in the manufacture of paper."—Dated 30th January, 1862.—(French Patent, 25th January, 1862.)

12,089. F. Tamigniau, of Ixelles, a Patent of Improvement for "Manufacture of seamless foot-coverings."—Dated 30th January, 1862.—(Original Patent, 22nd April, 1860.)

12,090. J. B. Pascal, represented by O. Daillencourt, of Brussels, a Patent of Improvement for "A generator of inflammable gas, and applying the same."—Dated 30th January, 1862.—(Original Patent, 21st January, 1861.)

12,091. J. M. P. Gruiez, represented by O. Daillencourt, of Brussels, for an imported invention of "A process for purifying alcohol."—Dated 30th January, 1862.—(French Patent, 18th March, 1861.)

12,092. J. J. Basset, represented by O. Daillencourt, of Brussels, for an imported invention of "A machine for the manufacture of festoons."—Dated 30th January, 1862.—(French Patent, 31st August, 1861.)

12,093. J. F. Leforestier, represented by O. Daillencourt, of Brussels, for an imported invention of "A kind of swing clock."—Dated 30th January, 1862.—(French Patent, 17th June, 1861.)

12,094. J. R. Boubilla, represented by O. Daillencourt, of Brussels, for an imported invention of "Fastenings of letter and other bags."—Dated 30th January, 1862.—(French Patent, 13th March, 1861.)

12,095. A. C. Sacré, sen., of Brussels, a Patent of Improvement for "A pneumatic hydrometer with free air."—Dated 31st January, 1862.—(Original Patent, 24th October, 1857.)

12,096. L. A. Pulvé, represented by L. De Meckenheim, of Ixelles, for an imported invention of "Fire-proof safes."—Dated 31st January, 1862.—(French Patent, 17th August, 1861.)

12,097. C. Gustafsson, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in the manufacture of nails."—Dated 31st January, 1862.—(Swedish Patent, 20th December, 1861.)

12,098. De Clerq and Co., of Ixelles, a Patent of Improvement for "An apparatus for raising water and feeding steam boilers."—Dated 31st January, 1862.—(Original Patent, 5th November, 1861.)

12,099. Th. and W. Green and R. Mathers, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in machines for mowing, rolling, and gathering grass."—Dated 1st February, 1862.—(English Patent, 10th January, 1861.)

12,100. L. N. De Meckenheim, of Ixelles, a Patent of Improvement for "An igniting apparatus."—Dated 3rd February, 1862.—(Original Patent, 9th January, 1862.)

12,101. Ch. Robertson, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in fire-arms."—Dated 3rd February, 1862.—(French Patent, 31st January, 1862.)

12,102. J. M. A. Duval, jun., represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of smoking pipes."—Dated 3rd February, 1862.—(French Patent, 25th May, 1860.)

12,103. E. H. Ladd, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in apparatus for cleaning rice, coffee, and other grains."—Dated 3rd February, 1862.—(French Patent, 4th December, 1861.)

12,104. C. Roswag, represented by H. Biebuyck, a Patent of Improvement for "A mode of extracting silver from lead, by means of metallic zinc."—Dated 3rd February, 1862.—(Original Patent, 11th February, 1861.)

12,105. J. B. Thiery, jun., represented by Ch. Detournay, of Ixelles, for an imported invention of "A superheating apparatus or hydro-smoke consuming generator with an extracting syphon." Dated 4th February, 1862.—(French Patent, 15th January, 1861.)

12,106. H. Bessemer, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in the manufacture of iron and steel."—Dated 4th February, 1862.—(French Patent, 13th December, 1861.)

12,108. F. Canier, represented by E. Colard, of Brussels, for an imported invention of "A wet stamping press."—Dated 5th February, 1862.—(French Patent, 31st August, 1861.)

12,029. Ch. Batteux, of Brussels, for "Manufacture of travelling and other bags."—Dated 5th February, 1862.

12,030. L. Gamas and E. G. Carré, represented by H. Biebuyck, of Brussels, for an imported invention of "Head-coverings for travelling and the country."—Dated 5th February, 1862.—(French Patent, 28th January, 1862.)

12,031. L. Bachellerie, represented by H. Biebuyck, of Brussels, for an imported invention of "A mode of using alkaline silicates in soap-works and washing."—Dated 5th February, 1862.—(French Patent, 15th November, 1861.)

12,032. L. J. Pomme de Mirimonde, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in journals, boxes, and other lubricating apparatus."—Dated 5th February, 1862.—(French Patent, 29th August, 1860.)

12,033. P. J. Hlubeck, represented by H. Biebuyck, of Brussels, for an imported invention of "A circular steam engine."—Dated 5th February, 1862.—(French Patent, 28th January, 1862.)

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459. James Spence, of the firm of Messrs. Richardson, Spence, and Co., of Liverpool, in the county of Lancaster, Merchants, for an invention of "An improved floating apparatus for transhipping grain, salt, and other substances in bulk from one navigable vessel to another, and for facilitating the weighing, screening, and fanning the grain or other substances during their transhipment, parts of which apparatus are equally applicable for discharging grain and other substances in bulk from navigable vessels into warehouses or other depôts, and to facilitate the weighing, screening, and fanning the grain or other substances previous to depositing the same."—Dated 21st February, 1862.

460. Richard Hume Skellern, of South Terrace, Hatcham Park, in the county of Surrey, Gentleman, for an invention of "An improved self-inking hand stamp or press."—Dated 21st February, 1862.

461. Henry Ward, of Castle Bromwich, in the county of Warwick, Farmer, for an invention of "An improvement or improvements in ladies' saddles."—Dated 21st February, 1862.

462. John Standish, of Egerton, near Bolton, in the county of Lancaster, and John Gooden, of the same place, for an invention of "Improvements in machinery or apparatus for stripping or cleaning the flats of carding engines."—Dated 21st February, 1862.

463. William Hamer, of Little Lever, near Bolton, in the county of Lancaster, Cotton Spinner, for an invention of "Improvements in apparatus employed in the preparation of cotton and other fibrous materials."—Dated 21st February, 1862.

464. Edward Smith Crease, of No. 17, Gracechurch Street, in the city of London, Mining Engineer, for an invention of "Improved machinery for drilling, boring, or excavating rock or other earthy substances."—Dated 21st February, 1862.

465. Robert Pickin and William Edwin Pickin, both of Birmingham, in the county of Warwick, Carriage Builders, for an invention of "Improvements in the manufacture of carriage bodies."—Dated 21st February, 1862.

466. Joseph Krasuski, of 29, Boulevart St. Martin, Paris, in the empire of France, Professor, for an invention of "An apparatus for mastering fiery horses."—Dated 21st February, 1862.

467. William McAdam, Pottery and Glass Manufacturer, and William Chrystal, Mariner, both of Glasgow, in the county of Lanark, North Britain, for an invention of "Improvements in sheaves or pulleys, journals, bushes, and other similar bearing or rubbing surfaces."—Dated 21st February, 1862.

468. Spencer Smith, of High Holborn, Engineer, for an invention of "Improvements in electromagnetic engines for obtaining and applying motive power."—Dated 21st February, 1862.

469. Horace Chavasse, of Birmingham, in the county of Warwick, Manufacturer, Timothy Morris, of Birmingham, in the county of Warwick, Manufacturer, and George Battison Haines, of Birmingham, in the county of Warwick, Agent, for an invention of "An improvement or improvements in the manufacture and ornamentation of metallic bedsteads, part of which is also applicable to other articles."—Dated 22nd February, 1862.

470. William Ashton, of Manchester, in the county of Lancaster, Machinist, for an invention of "Certain improvements in machinery or apparatus employed in the manufacture of braids and similar articles."—Dated 22nd February, 1862.

471. William Henry Ross, of Liverpool, in the county of Lancaster, Merchant, for an invention of "Improvements in the manufacture of sugar."—A communication to him from abroad by Edward Beanes, Merchant, residing at Havannah, island of Cuba, inventor.—Dated 22nd February, 1862.

472. James Kirkwood, of Paisley, in the county of Renfrew, North Britain, Manufacturer, for an invention of "Improvements in looms for weaving."—Dated 22nd February, 1862.

473. Augustus Bornemann, of No. 29, Monmouth Street, in the city and borough of Bath, Cabinet Manufacturer, for an invention of "Improvements in the mode of constructing fountains."—Dated 22nd February, 1862.

474. John Millington, of Oaken Gates, in the county of Salop, Timber Merchant and Builder, for an invention of "A new or improved hearse or bier."—Dated 22nd February, 1862.

475. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in apparatus for elevating hay, straw, and earth."—A communication to him from abroad by Levi Beardsley, a person resident at Boston, United States of America.—Dated 22nd February, 1862.

476. Charles Henry Julius William Maximilian Liebmann, of Huddersfield, in the county of York, Merchant, for an invention of "Improvements in felted fabrics suitable for carpets and other similar purposes, and the apparatus employed therein."—Dated 22nd February, 1862.

477. James Townend, of Bradford, in the county of York, Machinist, for an invention of "Improvements in jacquard engines."—Dated 22nd February, 1862.

478. James Peterkin Douglas Camp, of The International Patent Agency, 100, Fleet Street, in the city of London, for an invention of "Improvements in the arrangement of valves for steam and other engines, and with the means of operating the same."—A communication to him from abroad by Henry Steele, of Jersey city, state of New Jersey, United States of America.—Dated 22nd February, 1862.

479. David Blair White, of the town and county of the town of Newcastle-upon-Tyne, Doctor of Medicine, for an invention of "Improvements in apparatuses for protecting liquids from the atmosphere while remaining in and during their discharge from the vessels containing the same."—Dated 22nd February, 1862.

480. George Blakey, Samuel Blakey, and John Blakey, of Liverpool, in the county of Lancaster, Boot Top and Legging Manufacturers, and Benjamin White, of Birkenhead, in the county of Chester, Boot and Shoe Dealer, for an invention of "Improvements in leggings or gaiters."—Dated 22nd February, 1862.

481. George John Oram, of 19, Wilmington Square, in the county of Middlesex, Watch Manufacturer, for an invention of "A revolving pendant for giving greater security to watches and lockets against theft."—Dated 22nd February, 1862.

482. Robert Foster, the younger, of Beeston, in the county of Nottingham, Horticultural Builder, for an invention of "Improvements in the construction of buildings or erections to be used for horticultural or other purposes."—Dated 22nd February, 1862.

483. William Becket Johnson, of Manchester, in the county of Lancaster, Consulting Engineer, for an invention of "Improvements in steam engines."—Dated 22nd February, 1862.

484. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in burners for heating by gas."—A communication to him from Carsten Richard Meyn, a person resident at Carlshütte, Rendsburg, in the duchy of Holstein.——Dated 22nd February, 1862.

485. William Johnston, of Glasgow, in the county of Lanark, North Britain, Metal Merchant, for an invention of "Improvements in gas and other lamps and stoves."—Dated 24th February, 1862.

486. George West, of No. 1, Chapel Place, Long Lane, Borough, in the county of Surrey, for an invention of "Improvements in the construction of washing machines."—Dated 24th February, 1862.

487. John Cunningham and Robert Cunningham, both of Paisley, in the county of Renfrew, North Britain, Card Perforators, for an invention of "An improved ornamental fabric, and improvements in weaving and in jacquard apparatus."—Dated 24th February, 1862.

488. John Coope Haddan, of Bessborough Gardens, Pimlico, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in small arms and in artillery, and in projectiles for artillery."—Dated 24th February, 1862.

489. Richard Waller, of Baker Street, Portman Square, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in machinery and apparatus for joining leather and flexible and textile materials, and for the manufacture of boots and shoes and other coverings for the feet."—Dated 24th February, 1862.

490. Thomas Blair, of the city of Carlisle, Tea and and Coffee Dealer, for an invention of "Improvements in machinery or apparatus for cutting, chopping, and breaking refined lump sugar and other substances."—Dated 24th February, 1862.

491. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in apparatus for feeding or supplying steam boilers with water."—A communication to him from abroad by Messrs. François Pradel and François Théobald Wahl, Engineers, both of 29, Boulevart St. Martin, Paris.—Dated 24th February, 1862.

492. Thomas Nesham Kirkham, of West Brompton, and Vernon Francis Ensom, of Highgate, both in the county of Middlesex, for an invention of "Improvements in bleaching and dyeing yarn and thread when in the form of cops or otherwise wound."—Dated 24th February, 1862.

493. Percy Graham Buchanan Westmacott' of Newcastle-upon-Tyne, Civil Engineer, for an invention of "Improvements in constructing and applying armour plating to ships, vessels, and forts."—Dated 24th February, 1862.

494. Thomas Partridge, senior, of 50, Tenby Street, Birmingham, for an invention of "Improvements in apparatus for printing railway and other tickets or cards."—Dated 24th February, 1862.

495. Lewis Davis, of Gloucester Gardens, Hyde Park, in the county of Middlesex, Esquire, and Frederick Major Parkes, of Marylebone Boad, in the said county, Gentleman, for an invention of "An improvement in the production or manufacture of gas for lighting and heating."—Dated 24th February, 1862.

496. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in reaping and mowing machines."—A communication to him from abroad by Marie Pierre Amaranthe Ferdinand Mazier, of Laigle, France.—Dated 24th February, 1862.

497. Frederick St. George Smith, of Drogheda, Ireland, of the firm of Thomas Grendon and Co., Engineers, for an invention of "Improvements in machinery for grinding or reducing quartz, bones, grain, and other substances."—Partly communicated to him from abroad by Edward Furber, of New York, in the United States of America, and partly invented and discovered by himself."—Dated 24th February, 1862.

498. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the joints or chairs of the permanent way of railways."—A communication to him from abroad by Raymond French, of Seymour, Connecticut, and William Goddard, of Boston, Massachusetts, United States of America."—Dated 24th February, 1862.]

Notices to Proceed.

Notice is hereby given, that

2549. John Carter Ramsden, of Bradford, in the county of York, Stuff Manufacturer, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in healds or heddles for weaving, and in the machinery or apparatus for making the same."
As set forth in his petition, recorded in the said office on the 12*th day of October,* 1861.

2563. And Mowbray Walker, of St. Benet's Place, Gracechurch Street, in the city of London, Accountant, has given the like notice in respect of the invention of "Improvements in breech-loading rifles."
As set forth in his petition, recorded in the said office on the 14*th day of October,* 1861.

2564. And John Flinn, the elder, of Coventry Watch Manufacturer, has given the like notice in respect of the invention of "An improvement in watches."

2568. And John Gilbert, of Church Street, Old Kent Road, in the county of Kent, Engineer, has given the like notice in respect of the invention of "Improvements in endless railways."
As set forth in their respective petitions, both recorded in the said office on the 15*th day of October,* 1861.

2577. And William Biddell, of Birmingham, in the county of Warwick, Metallurgist, has given the like notice in respect of the invention of "Improvements in the manufacture of shot."
As set forth in his petition, recorded in the said office on the 16*th day of October,* 1861.

2580. And William Smith, of Salisbury Street Adelphi, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the apparatus for and method of increasing the illuminating power of gas."—A communication to him from abroad by Hugo Carstanjen, of Cologne.

2585. And Robert Smith, of 24, Higher Chatham Street, Chorlton-upon-Medlock, Machinist, and John Barnouin Rowcliffe, of Ducie Works, Manchester, both of the county of Lancashire, have given the like notice in respect of the invention of "Improvements in apparatus for winding yarn or threads on the pin-bobbins or spools used in small-ware and ribbon looms."

2586. And Charles De Groote, Shorthand Writer, of the city of Brussels, in the Kingdom of Belgium, has given the like notice in respect of the invention of "An improved instrument for corking bottles and other vessels."
As set forth in their respective petitions, all recorded in the said office on the 17*th day of October,* 1861.

2591. And William Croome, of Kilmersdon Radstock, near Bath, in the county of Somerset, Surgeon, has given the like notice in respect of the invention of "Improvements in lamps."

2593. And John Crosthwaite, of Liverpool, in the county of Lancaster, and Thomas Edward Arman, of Liverpool aforesaid, have given the like notice in respect of the invention of "Improvements in the construction of targets, and in signal apparatus to be used therewith."

2594. And John Goucher, of Worksop, in the county of Nottingham, Iron Founder, Engineer and Machinist, has given the like notice in respect of the invention of "Improvements in the beaters and drums used in thrashing machines."

2595. And Edward Peyton, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "Improvements in the frames of metal bedsteads."

2598. And Charles Herbert Holt, of Huddersfield, in the county of York, Engineer, has given the like notice in respect of the invention of "Improvements in steam engines and boilers, and in apparatus connected therewith, part of which im-

provements is also applicable to raising and measuring fluids generally."

2599. And William Streather, of Raunds, in the county of Northampton, Builder, has given the like notice in respect of the invention of "Improvements in the construction of wind engines, and in the structure containing the same, parts of which are applicable in the construction of windmills."

2601. And Patrick Robertson, of Sun Court, Cornhill, in the city of London, has given the like notice in respect of the invention of "Improvements in the manufacture of cartridges."—A communication to him from abroad by the inventors, Algernon Johnston, of the city of Middletown, in the state of Connecticut, and Lorenzo Dow, of the city of Topeka, in the state of Kansas, United States of America.

2604. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in braiding machines."—A communication to him from abroad by Thomas James Sloan, of Paris, in the empire of France, Engineer.

2605. And Hugh Macmeikan, of Stratford, in the county of Essex, has given the like notice in respect of the invention of "Improvements in smelting copper, gold, and other ores."—A communication to him from abroad by Rowland Vounder Rodda, of Alberton, near Adelaide, South Australia.

2606. And Charles Cheyne, of 19, Great George Street, Westminster, Civil Engineer, and Thomas Beeby Moseley, of Lewisham, in the county of Kent, have given the like notice in respect of the invention of "Improvements in the construction of apparatus for signalling on railways, by which improvements the signalling apparatus is rendered self registering or recording, and also applicable for measuring and recording the speed of passing trains and the time of their passage, part of which improvements is applicable for recording the speed of trains where signalling is not required."

As set forth in their respective petitions, all recorded in the said office on the 18th day of October, 1861.

2609. And Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, has given the like notice in respect of the invention of "A new or improved manufacture of titanic pig metal or alloy of titanium and iron."

2614. And James Bourne, of Oakamoor, in the county of Stafford, Engineer, and Edward Kidd, of Birmingham, in the county of Warwick, Manufacturer, have given the like notice in respect of the invention of "Improved machinery for the manufacture of metal tubes and cylinders, which is also applicable to other useful purposes."

2616. And Charles de Bergue, of Dowgate Hill, in the city of London, Engineer, has given the like notice in respect of the invention of "Improvements in sleeper chairs for the permanent way of railways."

As set forth in their respective petitions, all recorded in the said office on the 19th day of October, 1861.

2623. And Josiah Timmis Smith, of Barrow, in Furness, in the county of Lancaster, Engineer, has given the like notice in respect of the invention of "An improvement or improvements in collecting the inflammable gases evolved from blast furnaces."

2633. And John Toward, of the Glasshouse Bridge Iron Works, Newcastle-upon-Tyne, Engineer, has given the like notice in respect of the invention of "Improvements in armour plates for ships, and in securing the same to the sides of a vessel."

As set forth in their respective petitions, both recorded in the said office on the 21st day of October, 1861.

2636. And George England, of Hatcham Iron Works, New Cross, in the county of Surrey, Engineer, has given the like notice in respect of the invention of "Improvements in planing machines."

2637. And Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, has given the like notice in respect of the invention of "An improvement or improvements in the manufacture of a certain metallic alloy."

2639. And Henry May, of the firm of Knight and May, Eagle Factory, Tewkesbury, in the county of Gloucester, Shoe Manufacturer, has given the like notice in respect of the invention of "Improvements in goloshes."

As set forth in their respective petitions, all recorded in the said office on the 22nd day of October, 1861.

2643. And George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, has given the like notice in respect of the invention of "Improvements in processes or means employed for separating or extracting silver from lead."—A communication to him from abroad by Jules Frederic de la Batie, Advocate, of Paris, in the empire of France.

2650. And Augustin Morel, of Roubaix, in the department du Nord and empire of France, Manufacturer, has given the like notice in respect of the invention of "A new machine for combing all filamentous materials."

2656. And Isaac Louis Pulvermacher, of Oxford Street, in the county of Middlesex, Electrician, has given the like notice in respect of the invention of "Improvements in apparatuses for the production of galvanic and magneto-electric currents, and in machinery employed in making some of the apparatuses."

2657. And William Barry Lord, of the Royal Artillery, Veterinary Surgeon and First Lieutenant, now residing at Plymouth, in the county of Devon, has given the like notice in respect of the invention of "An improved plug and socket, or apparatus for closing and opening passages for the flow of liquids and fluids."

As set forth in their respective petitions, all recorded in the said office on the 23rd day of October, 1861.

2660. And Alexander Francis Campbell, of Great Plumstead, in the county of Norfolk, Gentleman, has given the like notice in respect of the invention of "Improvements in railways."
As set forth in his petition, recorded in the said office on the 24th day of October, 1861.

2678. And Henry Gilson, of the Maen-Offeren Slate Quarries, Festiniog, North Wales, has given the like notice in respect of the invention of "Improvements in slate-dressing machines, for cutting and trimming the edges of slates."
As set forth in his petition, recorded in the said office on the 25th day of October, 1861.

2684. And William Robertson, of the city of Manchester, Engineer, and John Muir Hetherington, of the Vulcan Works, in the city of Manchester, Machine Maker, have given the like notice in respect of the invention of "Certain improvements in mules for spinning and doubling."

2685. And John Sidebottom, of Harewood, near Mottram, in the county of Chester, Cotton Spinner and Manufacturer, has given the like notice in respect of the invention of "Certain Improvements in machinery for making partial tubes for the spindles of spinning and other machines."
As set forth in their respective petitions, both recorded in the said office on the 26th day of October, 1861.

2720. And Evan Leigh, of the city of Manchester, in the county of Lancaster, Mechanical Engineer, has given the like notice in respect of the invention of "Improvements in the construction of sailing ships and other vessels."
As set forth in his petition, recorded in the said office on the 30th day of October, 1861.

2732. And John Americus Fanshawe, of Tottenham, in the county of Middlesex, Engineer, and James Archibald Jaques, of the same place, Chemist, have given the like notice in respect of the invention of "Improvements in the construction of steam generators."
As set forth in their petition, recorded in the said office on the 31st day of October, 1861.

2784. And George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in electroplating or depositing metals."—A communication to him from abroad by Jabez Ellis Walcott, of Boston, Massachusetts, in the United States of America."
As set forth in his petition, recorded in the said office on the 5th day of November, 1861.

2786. And Herman D. Bradt, of Boston, in the state of Massachusetts, of the United States of America, has given the like notice in respect of the invention of "Certain new and useful improvements in machinery for lasting and pegging shoes."—A communication to him from John Taggart, a person resident at Roxbury, in the said state."
As set forth in his petition, recorded in the said office on the 6th day of November, 1861.

2797. And Theodore Schwartz, of the city and state of New York, United States of America, has given the like notice in respect of the invention of "Improvements in the construction of air engines or air motors."
As set forth in his petition, recorded in the said office on the 7th day of November, 1861.

2822. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improved apparatus for manufacturing and containing gaseous liquids."—A communication to him from abroad by Pierre Prudence Henri Couillard, of No. 45, Rue St. Sebastien, Paris, in the empire of France.
As set forth in his petition, recorded in the said office on the 9th day of November, 1861.

2833. And Chauney Orrin Crosby, of New Haven, Connecticut, in the United States of America, but now residing at Bridge Street, Blackfriars, in the city of London, Gentleman, has given the like notice in respect of the invention of "Improvements in the manufacture of pointed trimming, and in the machinery for manufacturing pointed trimming."
As set forth in his petition, recorded in the said office on the 11th day of November, 1861.

2924. And George Henry Polyblank, of No. 55, Gracechurch Street, in the city of London, and No. 187A, Piccadilly, in the county of Middlesex, Photographic Artist, has given the like notice in respect of the invention of "A new or improved method of protecting and preserving photographic and other prints, water colour drawings, and other works of art, from injury and decay."
As set forth in his petition, recorded in the said office on the 21st day of November, 1861.

3009. And Thomas Ellis, of Swindon, in the county of Wilts, Engineer, has given the like notice in respect of the invention of "Certain improvements in rails for permanent ways."
As set forth in his petition, recorded in the said office on the 29th day of November, 1861.

3150. And Emile Cajot, Merchant, of St. Servais, Belgium, has given the like notice in respect of the invention of "Improvements in the treatment of pyrites for the manufacture of iron."
As set forth in his petition, recorded in the said office on the 14th day of December, 1861.

3182. And William Tate, of Horsley Hill, near South Shields, Durham, has given the like notice in respect of the invention of "Improvements in armour, and in making and applying the same

for protecting wood and iron ships of war and batteries."

As set forth in his petition, recorded in the said office on the 19th day of December, 1861.

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23. And HERMANN ESCHWEGE, of 14, Mincing Lane, in the city of London, has given the like notice in respect of the invention of "Improvements in treating wood and other vegetable spirit."

As set forth in his petition, recorded in the said office on the 2nd day of January, 1862.

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81. And THOMAS RAMSAY, of the town and county of Newcastle-upon-Tyne, Coal Owner, has given the like notice in respect of the invention of "Improvements in the manufacture of coke."

As set forth in his petition, recorded in the said office on the 11th day of January, 1862.

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306. And WILLIAM CAMPION and HENRY JOHNSON, both of the town and county of the town of Nottingham, Sewing and Stitching Machine Manufacturers, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for making the welts of hose or other articles made of looped or knitted fabrics."

As set forth in their petition, recorded in the said office on the 5th day of February, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

LIST of LETTERS PATENT which passed the Great Seal on the

25th February, 1862.

2125. JOHN LYON FIELD, of Colton Haverthwaite, near Newton in Cartmel, Lancashire, for an invention of "Improvements in the construction of armour plates, and in their application to ships and batteries."—Dated 26th August, 1861.

2133. LOUIS MARIE FRANÇOIS PATUREAU, of Paris, France, Gentleman, for an invention of "An improved thread protecting clew-box."—Dated 27th August, 1861.

2139. JOHN MATTHIAS HART, of 76, Cheapside, in the city of London, and ROBERT LAVENDER, of 2, Acacia Cottages, New Road, Hornsey, both in the county of Middlesex, for an invention of "Improvements in handles or knobs of locks and latches, and in the means of applying them."—Dated 27th August, 1861.

2141. JAMES RONALD, of Liverpool, in the county of Lancaster, Merchant, for an invention of "Improvements in machinery for dressing hemp, flax, manilla, and other like long fibrous material."—Dated 28th August, 1861.

2142. BENJAMIN BROWNE, of No. 52, King William Street, in the city of London, Civil Engineer and Patent Agent, for an invention of "An improved process and apparatus for concentrating ores or tailings, or separating pulverized mineral substances of different kinds or qualities from each other."—A communication to him from abroad by Henry Eberhard Roeder, of No. 363, Broadway, New York, in the United States of America, Engineer.—Dated 28th August, 1861.

2146. JAMES DUNCAN, of Greenock, in the county of Renfrew, North Britain, Sugar Refiner, for an invention of "Improvements in the manufacture of sugar, and in the apparatus employed therein, also in the apparatus employed in reburning animal charcoal."—Dated 28th August, 1861.

2156. ROBERT SHAW, of Portlaw, in the county of Waterford, in Ireland, Cotton Spinner and Manufacturer, for an invention of "Improvements in windlasses, capstans, and other machinery for hoisting and lowering weights."—Dated 30th August, 1861.

2161. HENRY WILLIAM SPENCER, of Stepney Causeway, Commercial Road, county of Middlesex, Oil Manufacturer, for an invention of "Improvements in the manufacture of animal oils, the said improvements relating more particularly to the processes of refining them to be used for lubricating purposes."—Dated 30th August, 1861.

2163. JAMES HARRIS, of Hanwell, in the county of Middlesex, Engineer, for an invention of "Improvements in stopping or retarding railway and other carriages and trains, locomotive and stationary engines and machinery, together with apparatus employed therein, which apparatus is applicable to the raising and lowering of weights and other purposes for which power is required."—Dated 30th August, 1861.

2171. PETER TAYLOR, of the City Road, Hulme, in the city of Manchester, Engineer, for an invention of "Improvements in apparatus for removing the sediment from and preventing incrustation in steam boilers."—Dated 31st August, 1861.

2172. THOMAS MORETON JONES, of Great Pulteney Street, in the county of Middlesex, Mechanician, for an invention of "Improvements in apparatus for suspending and turning meat, fowls, and such like articles for roasting."—Dated 31st August, 1861.

2177. JOHN JONES, of 55, North John Street, Liverpool, in the county of Lancaster, Tailor and Draper, for an invention of "Improvements in clasps or fastenings for garments, belts, harness, and like articles."—Dated 31st August, 1861.

2187. JOSEPH HALL, of Oldham, in the county of Lancaster, Engineer, for an invention of "Improvements in portable pumps or engines for extinguishing fires and other purposes."—Dated 2nd September, 1861.

2188. JOHN WATSON, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in furnaces."—Dated 2nd September, 1861.

2189. EMILE ALCAN, of Coleman Street Buildings, in the city of London, Merchant, for an invention of "Improvements in machinery for carding and combing wool, and other filamentous substances."—A communication to him from abroad by Celestin Martin, of Forge Thiry lez Verviers, Belgium.—Dated 2nd September, 1861.

2190. ALPHONSE NICOLAS SALERES, of No. 170, Rue de Charonne, in the city of Paris, in the empire of France, Paper Manufacturer, for an invention of "Improvements in printing and coloring paper, chintz, and other fabrics, and machinery or apparatus for that purpose."—Dated 2nd September, 1861.

2192. WILLIAM CAMPION and HENRY JOHNSON, both of the town and county of the town of Nottingham, Sewing and Stitching Machine Manufacturers, for an invention of "Improvements in machinery or apparatus for cutting the selvedges or edges of knitted or other fabrics while being stitched."—Dated 2nd September, 1861.

2193. DANIEL WARD, of Beaminster, in the county of Dorset, Engineer and Iron Founder, for an invention of "Improved machinery for twisting and laying flax, hemp, and other fibrous materials."—Dated 3rd September, 1861.

2195. EDMUND SUCKOW and EDWARD HABEL, of Oldham, in the county of Lancaster, Engineers, for an invention of "Improvements in machinery or apparatus for producing a strong blast or current of air."—Dated 3rd September, 1861.

2203. FRANÇOIS EUGÈNE SCHNEIDER, Gunsmith, of No. 13, Rue Gaillon, Paris, for an invention of "Improvements in cartridges for breach-loading fire-arms, and in the machinery for manufacturing the same."—Dated 4th September, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 22nd February*, 1862, *inclusive.*)

20th February.

503. JOSEPH CROSLAND, of Crosland Moor, Huddersfield, in the county of York, Manufacturer, for an invention of "Improvements in looms for weaving textile fabrics."—Dated 24th February, 1859.

22nd February.

485. EDWARD LUND, of Manchester, in the county of Lancaster, Gentleman, for an invention of "Certain improvements in the manufacture of fabrics or textures to be used in the construction of umbrellas and parasols."—Dated 22nd February, 1859.

498. HENRY BERNOULLI BARLOW, of the city of Manchester, Patent Agent, for an invention of "Improvements in apparatus for condensing steam."—A communication from abroad by François Daina, of Bergamo, in the empire of Austria.—Dated 24th February, 1859.

506. JOHN DALE, of Cornbrook, in Manchester, and county of Lancaster, Manufacturing Chemist, for an invention of "Improvements in concentrating caustic alkalies, and in applying a product therefrom to the purpose of obtaining motive-power and to other purposes."—Dated 24th February, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 21st February*, 1862, *inclusive.*)

20th February.

389. PAUL PRINCE, of Derby, in the county of Derby, Railway Inspector, for an invention of "An improvement in the patterns employed in making moulds for railway chairs."—Dated 21st February, 1855.

21st February, 1862.

409. BARNABY ANGELO MURRAY, of Dublin, Professor of Languages, for an invention of "Improvements in winding, doubling, and twisting silk, flax, and other fibrous substances."—Dated 24th February, 1855.

FOREIGN and COLONIAL PATENT LAWS and RULES, being translations or copies of Official Communications, may be found in the following Numbers of this Journal, published at 2*d.* each, or 3*d.* free by post:—

Austria, No. 291.
Bavaria, No. 262.
Belgium, Nos. 292 and 348.
Baden, and Petty States of Germany, No. 325.
British Guiana, No. 798.
Canada, Nos. 279 and 625.
Cape of Good Hope, No. 727.
Ceylon, No. 648.
Cuba, No. 498.
Dutch West Indies, No. 322.
France, No. 228.
Greece, No. 325.
Germany, No. 435.
Hanover, No. 231.
India, Nos. 240, 348, and 552.
Jamaica, No. 660.
Mexico, No. 496.
Netherlands, No. 289.
New South Wales, No. 386.
Norway, No. 665.
Prussia, Nos. 313 and 329.
Parma, Piacenza, and Guastalla, No. 321.
Portugal, No. 325.
Poland, No. 335.
Roman States, No. 319.
Russia, Nos. 334 and 508.
Sardinia, Nos. 233, 235, 636, 637, 639, and 640.
Saxony, No. 236.
Sicilies (the Two), No. 316.
Spain, No. 323.
Sweden, Nos. 327 and 354.
United States of America, Nos. 638, 646, and 789.
Victoria, Nos. 186 and 359.
Wurtemberg, No. 314.

List of Specifications published during the week ending 22nd February, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
1769	10*d.*	Briggs, E., and Fearnley, S.—Piled fabrics.
1770	3*d.*	Walker, T., junior.—Apparatus for polarising light.
1771	3*d.*	Treble, G., the younger.—Show cases.
1772	3*d.*	Cobley, T.—Manufacture of silicates, &c.
1773	3*d.*	Cobley, T.—Preserving and indurating timber, &c.
1774	3*d.*	Taylor, R., and Price, T.—Tin and terne plates.
1775	3*d.*	Coombe, J. C., aud Wright, J.—Glass, pottery, porcelain, &c.
1776	3*d.*	Cobley, T.—Manufacture and application of fluo-silicates of tin, zinc, and baryta.
1777	10*d.*	Browne, B.—(*A communication from E. Ab-der-Halden and C. Seiler.*)—Clearing and smoothing spun thread or yarns, &c.
1778	4*d.*	Topham, A., Topham, J., and Topham, J.—Lace.
1779	5*d.*	Johnson, J. H.—(*A communication from H. B. Sears.*)—Cleaning rice.
1780	3*d.*	Gössell, O. J. T.—(*A communication from H. Ehrhardt.*)—Combined locomotive engine and carriage.
1781	3*d.*	Rigby, W.—Armour plates.
1782	3*d.*	Mabson, J.—Sewing machines.
1783	3*d.*	De la Provotais, E. G. F.—Extracting fibres for the manufacture of paper, &c.
1784	7*d.*	Clark, W.—(*A communication from T. Foucault.*)—Stage scenery and apparatus.
1785	3*d.*	Mapple, J.—Telegraphic apparatus.
1786	3*d.*	Goucher, J.—Stacking corn, &c.
1787	3*d.*	Wells, J. S.—Needle for the manufacture of looped fabrics.
1788	10*d.*	Blinkhorn, J.—Machinery for working railway signals.
1789	9*d.*	Jones, R.—Safety lamps.
1790	3*d.*	Gillard, J. P.—Manufacture of soda, &c.
1791	3*d.*	Holder, D. jr.—Foot and kneeling stools.
1792	5*d.*	Abel, C. D.—(*A communication from H. C. de Ruolz.*)—Alloys of silver, &c.
1793	3*d.*	Palmer, W.—Lamps.
1794	3*d.*	Harnett, A. W.—Steam engines, air engines, and pumps.
1795	9*d.*	Butterworth, J. H.—(*A communication from J. E. Tourné.*)—Heating water, &c.
1796	9*d.*	Butterworth, J. H.—(*A communication from J. E. Tourné.*)—Heating air, &c.
1797	3*d.*	Parker, J., Wells, J., and Wells, B.—Steam engiues, boilers, furnaces, &c.
1798	5*d.*	Mason, J.—(*A communication from J. B. Mallat and E. V. Saglier.*)—Metallic pens.
1799	3*d.*	Redfern, C. E.—Locks, &c.
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500. JEREMIAH WOODROW, of Oldham, in the county of Lancaster, Hat Manufacturer, for an invention of "A certain improvement in the manufacture of hats or coverings for the head."—Dated 25th February, 1862.

501. DAVID WILKIE, of No. 15, Great Hermitage Street, Wapping, E., for an invention of "A composition to be used on the bottoms of sailing vessels and steamers for the prevention of barnicle and other matter adhering thereto while employed in sea water."—Dated 25th February, 1862.

502. JOHN PIDDINGTON, of No. 52, Gracechurch Street, in the city of London, Patent Agent, for an invention of "An improved machine for shelling or husking all kinds of grain."—A communication to him from abroad by Melchior Nolden, residing at Frankfort on the Maine.—Dated 25th February, 1862.

503. JOHN PIDDINGTON, of No. 52, Gracechurch Street, in the city of London, Patent Agent, for an invention of "Improved condensing apparatus adapted for high pressure steam engines, especially locomotive engines."—A communication to him from abroad by William Winter, of Charlottenburg, near Berlin, in the kingdom of Prussia.—Dated 25th February, 1862.

504. EDWIN BLISS, of No. 36, Percival Street, Clerkenwell, in the county of Middlesex, Jeweller, and HENRY LAMPLOUGH, of No. 113, Holborn Hill, in the said county of Middlesex, Chemist, for an invention of "Improved means for viewing microscopic photographs and other minute objects."—Dated 25th February, 1862.

505. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in tobacco pipes."—A communication to him from abroad by Mr. Paul Ambroise Doury, Proprietor, of 29, Boulevart St. Martin, Paris. — Dated 25th February, 1862.

506. THOMAS WATSON, of Thornton, near Bradford, in the county of York, Overlooker, and ROBERT DRACUP, of the same place, Mechanic, for an invention of "Improvements in means or apparatus for preparing and combing wool and other fibres."—Dated 25th February, 1862.

507. CARLO MINASI, of No. 3, Saint James's Terrace, Kentish Town Road, in the county of Middlesex, Professor of Music, for an invention of "Improvements in cartridges, and in apparatus for facilitating the proper aiming with fire arms."—Dated 25th February, 1862.

508. CHARLES WILLIAM HECKETHORN, of Saint Ann's Road, Brixton, in the county of Surrey, for an invention of "Improvements in obtaining and applying motive power."—Dated 25th February, 1862.

509. JOHN IMRAY, of 65, Westminster Bridge Road, Lambeth, in the county of Surrey, Engineer, for an invention of "Improvements in hinges."—Complete specification.—Dated 25th February, 1862.

510. JOSEPH WHITWORTH, of Manchester, for an invention of "Improvements in manufacturing projectiles."—Dated 25th February, 1862.

511. WILLIAM MCINTYRE CRANSTON, of 58, King William Street, in the city of London, for an invention of "Improvements in machinery for reaping and mowing."—The result partly of a communication made to him from abroad by Walter Abbott Wood, a person resident at

Hoosick Falls, Reusselaer county, New York, United States of America, and partly invented and discovered by himself.—Dated 25th February, 1862.

512. Courtenay Kingsford, of Fenchurch Street, in the city of London, Merchant, for an invention of "A new composition for the manufacture of bread."—Dated 25th February, 1862.

513. Pierre Joseph Guyet, of Paris, in the empire of France, Civil Engineer, for an invention of "An improved coupling for uniting pipes between locomotives and tenders, applicable also to the coupling of other pipes."—Dated 25th February, 1862.

514. Harry Whiteside Cook, of Manchester, in the county of Lancaster, a Minor, for an invention of "An improved mode of and apparatus for propelling by means of electricity."—Dated 25th February, 1862.

515. John Boocock and Thomas Davenport, both of Bury, in the county of Lancaster, Mechanics, for an invention of "Improvements in machinery for preparing, spinning, and doubling cotton and other fibrous materials."—Dated 26th February, 1862.

516. Alfred Green, of Rose Cottage, North Road, Forest Hill, parish of Lewisham, Kent, for an invention of "Improvements in machinery for bordering paper envelopes and cards with black or colored borders."—Dated 26th February, 1862.

517. Alexander Stephen, junior, of Glasgow, in the county of Lanark, North Britain, Ship Builder, for an invention of "Improvements in the construction of ships or vessels."—Dated 26th February, 1862.

518. George Davies, of No 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improvements in emptying or draining the water from careening docks in maritime ports."—A communication to him from abroad by Pierre Lucien Fontaine, of Paris, Engineer.—Dated 26th February, 1862.

519. George Rees, of Goswell Road, in the parish of Clerkenwell, Engineer, for an invention of "Improvements in the construction of marine sub-ways."—Dated 26th February, 1862.

520. Agathe Desirée Duparet, of Paris, France, Spinster, for an invention of "Improvements in the ornamentation of tissues."—Dated 26th February, 1862.

521. Jacques Dothée, of Paris, France, Gentleman, for an invention of "Improvements in the colouring or dyeing of horse-hair tresses, hats, or ornaments."—Dated 26th February, 1862.

522. James Henry Bennett, of Blackburn, in the county of Lancaster, for an invention of "Improvements in steam generators, and in engines to be worked by atmospheric pressure or steam and air combined."—Dated 26th February, 1862.

523. Thomas King and Robert Varvill, of Liverpool, in the county of Lancaster, Merchants, for an invention of "Improvements in apparatus for controlling the flow of fluids for flushing water-closets."—Dated 26th February, 1862.

524. John Cliff, of the Imperial Potteries, Lambeth, in the county of Surrey, for an invention of "Improvements in glazing stoneware, red clay ware, porcelain, and other kinds of earthenware."—Dated 26th February, 1862.

525. William Miller, of Upper Stamford Street, Blackfriars, in the county of Surrey, for an invention of "Improvements in the manufacture of sugar."—Dated 26th February, 1862.

526. Charles Louis Knoll, of 187, Tottenham Court Road, in the county of Middlesex, for an invention of "Improvements in pianofortes."—Dated 26th February, 1862.

527. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the clasps or fastenings of bracelets, neck chains, and other articles of jewellery."—A communication to him from abroad by Messrs. Eugène Fauche and Charles Auguste Ravaut, both of 29, Boulevart St. Martin, Paris, Manufacturing Jewellers."—Dated 26th February, 1862.

528. Edwin George Bruzaud, of Pembroke Road, Kensington, in the employ of Messrs. Erard and Company, of 18, Great Marlborough Street, Harp and Pianoforte Manufacturers, for an invention of "Improvements in pianofortes."—Dated 26th February, 1862.

529. William Peacock Savage, of Roxham, Downham, Norfolk, for an invention of "Improvements in fire-arms."—Dated 26th February, 1862.

530. John Medhurst, of 53, Lower Queen Street, Rotherhithe, in the county of Surrey, Shipwright, for an invention of "Improvements in apparatus for reefing and furling the top sails, courses, and other square sails of vessels."—Dated 26th February, 1862.

531. John Smith, senior, of Coven, near Wolverhampton, for an invention of "Improvements in drying wheat and other grain."—Dated 26th February, 1862.

532. George Torr, of Bucks Row, Whitechapel, in the county of Middlesex, and Lower Road, Deptford, in the county of Surrey, Animal Charcoal Manufacturer, for an invention of "Improvements in and an improved apparatus for manufacturing and reburning animal charcoal."—Dated 27th February, 1862.

533. Thomas Adams, of Deptford, in the county of Kent, Engineer, for an invention of "Improved arrangements for effecting an equilibrium of the steam pressure upon valves, the said arrangements being also applicable for effecting equilibrium of fluid or gaseous pressure upon other valves."—Dated 27th February, 1862.

534. Charles Clark, of 361, City Road, London, for an invention of "Improvements in tea and other trays for the table."—Dated 27th February, 1862.

535. William Armand Gilbee, of No. 4, South Street, Finsbury, in the county of Middlesex, Patent Agent, for an invention of "Improvements in the construction of fire grates for steam and other boilers, and suitable to all kinds of fires."—A communication to him from abroad by De Vos-

Verraert, of Brussels, in the kingdom of Belgium. —Dated 27th February, 1862.

536. William Smith, of Salisbury Street, Adelphi, for an invention of "Improvements in the method of making cigaretts, and in the apparatus, and materials to be employed therein."—A communication to him from abroad by M. Lemaire-Daimé, of Andresy, in the empire of France.—Dated 27th February, 1862.

537. James Tangye, of the firm of Tangye, Brothers, and Price, of Birmingham, in the county of Warwick, Manufacturers, for an invention of "An improvement or improvements in hydraulic lifting jacks."—Dated 27th February, 1862.

538. Sir Charles Tilston Bright, of Victoria Street, in the city of Westminster, Civil Engineer, for an invention of "Improvements in electric telegraphs, and in apparatus connected therewith, and employed in the manufacture thereof."—Dated 27th February, 1862.

539. Thomas Bray, of Dewsbury, in the county of York, for an invention of "Improvements in ornamenting wood in imitation of inlaid work."—Dated 27th February, 1862.

540. Robert Seager, of Ipswich, for an invention for "Improvements in the manufacture of boots and shoes, and in apparatus employed therein."—Dated 27th February, 1862.

541. John Robert Foster, of Winsley Street, Oxford Street, in the county of Middlesex, Trimming Manufacturer, for an invention of "Improvements in the manufacture of bullion-fringe or cord."—Dated 25th February, 1862.

542. William Stuart Wood, of Larchfield Foundry, Leeds, in the county of York, Engineer, for an invention of "Improvements in valves for regulating the flow of steam, water, or other fluids, and in means or apparatus for working or actuating them direct from the governor, or when worked by expansion cams in connection therewith."—Dated 27th February, 1862.

543. Joseph Revell, of Dukinfield, in the county of Chester, Master Plasterer and Decorator, for an invention of "Improvements in oil cans."—Dated 27th February, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2950. To Fédor De Wyldé, 10, Great College Street, Camden Town, London, for the invention of "Improvements in paper-making machinery."—A communication to him from abroad by Louis Dupont, Nancy, in the empire of France.

On his petition, recorded in the Office of the Commissioners on the 23rd day of November, 1861.

2972. To Charles Stevens, of 31, Charing Cross, in the county of Middlesex, Patent Agent, for the invention of "An improved indelible anti-corrosive ink."—A communication to him from abroad by Louis Croc, of Paris, in the empire of France.

On his petition, recorded in the Office of the Commissioners on the 26th day of November, 1861.

3221. To Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the invention of "Improved means for reducing the friction and wear of slide valves of steam engines." —A communication to him from abroad by Mr. A. Buchanan, of Jersey city, state of New Jersey, United States of America.

On his petition, recorded in the Office of the Commissioners on the 24th day of December, 1861.

3274. To Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for the invention of "Improvements in saddles." — A communication to him from abroad by John B. Peck, of Yonkers, in the county of Westchester and state of New York, and Thomas B. Peck, of New York, United States of America.

On his petition, recorded in the Office of the Commissioners on the 31st day of December, 1861.

87. To Anthony Gapper Southby, of Bulford, in the county of Wilts, for the invention of "Improvements in the preparation of pulp for paper making."

On his petition, recorded in the Office of the Commissioners on the 13th day of January, 1862.

112. To Edward Lord, of Todmorden, in the county of York, Machine Maker, for the invention of "Improvements in check straps applicable to looms for weaving."

115. And to Joseph Ridsdale, of the Minories, in the city of London, Engineer, for the invention of "Improvements in preparing sheet lead for covering floors, stairs, and other like purposes."

On both their petitions, recorded in the Office of the Commissioners on the 15th day of January, 1862.

137. To Samuel Dreyfous, of Paris, France, Civil Engineer, for the invention of "An improved throstle spinning frame."—A communication to him from Monsieur Charles Leyherr, a person resident at Laval, France.

On his petition, recorded in the Office of the Commissioners on the 18th day of January, 1862.

150. To John Stenhouse, of 11, Upper Brunswick Terrace, Barnsbury Road, in the county of Middlesex, Chemist, for the invention of "Improvements in the protection of metallic surfaces, and in rendering certain substances less pervious to air and moisture."

On his petition, recorded in the Office of the Commissioners on the 21st day of January, 1862.

171. To John Tomlinson, of Liverpool, in the county of Lancaster, Iron Bedstead Manufacturer, for the invention of "Improvements in washing machines."

173. And to Frederik William Werner, of Mannheim, in the grand duchy of Baden, for the invention of "An improved method of, and apparatus for, destroying vermin."

On both their petitions, recorded in the Office of the Commissioners on the 23rd day of January, 1862.

213. To James List, of Carisbroke, Isle of Wight, county of Hampshire, England, for the invention

of "An improved means and instrument for obtaining distances and heights and distances between distant objects without computation."

215. To Stephen Smith and Thomas Smith, both of the town and county of the town of Nottingham, Cord and Twine Manufacturers, for the invention of "Improvements in the manufacture of cord and twine from mill spun yarns."

222. To Samuel Cunliffe Lister and James Warburton, of Manningham, near Bradford, in the county of York, Spinners, for the invention of "Improvements in preparing cotton for spinning."

228. And to Rudolph Bodmer, of Newport, in the county of Monmouth, and William Wilson, Foreman, in the employ of Messieurs Bodmer, Brothers, of Newport aforesaid, for the invention of "Improvements in the process of manufacturing artificial stones, parts of which improvements are also applicable to the manufacture of artificial fuel."

On their several petitions, recorded in the Office of the Commissioners on the 28th day of January, 1862.

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229. To John Henry Brierley, of Park Terrace, Halifax, Manufacturer, Beech Hill Mills, Halifax, and 58, Aldermanbury, London, for the invention of "An improved clasp or fastener for reversible belts, bands, or straps."

233. And to John McKean, of Walmer Bridge Mills, near Preston, in the county palatine of Lancaster, Manufacturer, and James Gabbott, of the same place, Manager, for the invention of "Improvements in sizing or dressing yarns or textile materials."

On both their petitions, recorded in the Office of the Commissioners on the 29th day of January, 1862.

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254. To Horatio White, of 13, Mornington Place, Hampstead Road, in the county of Middlesex, for the invention of "Improvements in shirt collars."

On his petition, recorded in the Office of the Commissioners on the 31st day of January, 1862.

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269. To William Smith, of Bury, in the county of Lancaster, for the invention of "Improvements in machinery for the manufacture of bricks, tiles, or other articles of a similar nature or character."

273. And to John Hill, of 212, Piccadilly, county of Middlesex, Travelling Equipage Maker, for the invention of "Improvements in the construction of portable chairs and other articles for sitting or reclining on, road, Bath, invalid, wheel, and children's carriages, ambulances, or vehicles for carrying sick or wounded persons."

On both their petitions, recorded in the Office of the Commissioners on the 1st day of February, 1862.

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283. To David Joy, of the city of Manchester, in the county of Lancaster, Engineer, for the invention of "Improvements in machinery for forging metals, also applicable to other purposes."

285. And to Charles Stevens, of 31, Charing Cross, in the county of Middlesex, Patent Agent, for the invention of "An improved axle-tree."—A communication to him from abroad by Victor Boulanger, of Paris, in the empire of France.

On both their petitions, recorded in the Office of the Commissioners on the 3rd day of February, 1862.

313. To Robert Russell, of Derby, in the county of Derby, Stove Grate Manufacturer, for the invention of "Improvements in stove grates and kitchen ranges."

317. To Edward Cooper Willis, of Addison Road, Kensington, in the county of Middlesex, Bachelor of Medicine, for the invention of "Improvements in the treatment of wax and other substances of a similar nature."

319. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in the preparation of pulp for paper."—A communication to him from abroad by Paul Emile Mollet, of Paris, in the empire of France.

321. And to John Dearman Dunnicliff, of Nottingham, for the invention of "Improvements in the manufacture of lace or net bonnet fronts and other similar articles, and in apparatus used in this manufacture."

On their several petitions, recorded in the Office of the Commissioners on the 6th day of February, 1862.

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325. To Hugh Adams Silver, of Silvertown, in the county of Essex, Manufacturer, for the invention of "Improvements in the manufacture of trays, cases, and other similar articles and bottles in ebonite, vulcanite, or other hard india rubber."

327. To Alexander McKenzie, of Glasgow, in the county of Lanark, North Britain, Engineer, and Francis Panthel, of the same place, Machinist, for the invention of "Improvements in sewing machines."

329. To Henry Macaulay and Alphonso Florencio Notley, both of Rotherham, in the county of York, for the invention of "Improvements in fire guards."

331. And to Henry Brinsmead, of Ipswich, in the county of Suffolk, Machinist, for the invention of "Improvements in apparatus for moving, elevating, cleaning, and dressing grain."

On their several petitions, recorded in the Office of the Commissioners on the 7th day of February, 1862.

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333. To John Howie, of Hureford Colliery, Kilmarnock, Scotland, Coal Master, for the invention of "Improvements in regulating the consumption of fuel in furnaces."

337. And to James Carrington, of Queen's Gate Mews, Kensington, in the county of Middlesex, Groom, for the invention of "Improvements in the construction and fitting up of stalls and horse boxes."

On both their petitions, recorded in the Office of the Commissioners on the 8th day of February, 1862.

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339. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improved apparatus for the administration of vapour baths."—A communication to him from Eliacin Edouard Pomier (M.D.), a person resident at Egriselles-le-Boccage (Yonne), in France.

341 To Richard Philp and John Philp, of Lower John Street, Golden Square, in the county of Middlesex, Civil Engineers, for the invention of "An improvement in propellers for propelling ships, boats, and other vessels in water."

343. To Bedford Clapperton Trevelyan Pim, of the Junior United Service Club, Saint James's, Commander in the Royal Navy, and George Fawcus, of North Shields, in the county of Northumberland, Ship Builder, for the invention of "Improvements in uniting iron plates and in uniting and fixing armour plates on ships and other structures."

345. And to George Smith, of Holland Grove, North Brixton, in the county of Surrey, for the invention of "Improvements in shawls."

On their several petitions, recorded in the Office of the Commissioners on the 10*th day of February*, 1862.

353. To Ellis Sutton, of Radcliffe, in the county of Lancaster, Cotton Spinner, for the invention of "A certain improvement in machinery or apparatus for preparing cotton and other fibrous substances for spinning."

355. To William Lyall, of Amiens, in the department de la Somme, France, for the invention of "Improvements in machinery for preparing flax, hemp, and other fibrous substances."

358. To John Brinsmead, of Charlotte Street, Fitzroy Square, in the county of Middlesex, Pianoforte Manufacturer, for the invention of "Improvements in pianofortes."

361. To James Jennings McComb, of Pump Court, Temple, in the county of Middlesex, Gentleman, for the invention of "An improved fastening for securing cotton and other bales or packages."

363. And to John Hetherington, of Manchester, the county of Lancaster, Machine Maker, for the invention of "Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning."

On their several petitions, recorded in the Office of the Commissioners on the 11*th day of February*, 1862.

366. To John Robb, of the city of Aberdeen, North Britain, Merchant, for the invention of "Improvements in ventilation, and in apparatus employed for that purpose."

367. To James Brickhill, of No. 5, Stepney Causeway, Commercial Road East, in the county of Middlesex, Mechanic, for the invention of "Improvements in the cylinders and pistons of steam engines."

369. To Andrew Hinshaw, of Aldermanbury Postern, in the city of London, Manufacturer, for the invention of "Improvements in hooped skirts."—A communication to him from abroad by John Coulthard Kelley, of New York, United States of America.

370. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in preparing and ornamenting cast iron and other metals in order to fit them for articles of furniture and decoration and other similar uses."—A communication to him from abroad by Jean Baptiste Godin, of Guise, France.

371. To John Stephen Joseph, of Rhostyllan, near Wrexham, in the county of Denbigh, North Wales, for the invention of "Improvements in coke ovens, and in utilizing the waste heat from the same."

373. And to Alexander Samuelson, of 28, Cornhill, in the city of London, for the invention of "Improvements in building ships and vessels."

On their several petitions, recorded in the Office of the Commissioners on the 12*th day of February*, 1862.

376. To John Stephen Joseph, of Rhostyllan, near Wrexham, in the county of Denbigh, North Wales, for the invention of "An improved retort oven, and the utilization of the spare heat from the same."

383. To Charles Denton Abel, of 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, for the invention of "Improvements in towing boats or other vessels on rivers, and in apparatus employed for that purpose."—A communication to him from abroad by Jean François Cail, residing in Paris, in the empire of France.

391. To James Edward McConnell, of Wolverton, in the county of Buckingham, Engineer, for the invention of "Improvements in parts of boilers and furnaces for locomotive and other engines."

393. To James Edward McConnell, of Wolverton, in the county of Buckingham, Engineer, for the invention of "Improvements in railway breaks and in warming railway carriages."

395. And to William George Valentin, of the Royal College of Chemistry, Government School of Mines, Oxford Street, in the county of Middlesex, Chemist, for the invention of "An improved mode of and apparatus for coking coal."

On their several petitions, recorded in the Office of the Commissioners on the 13*th day of February*, 1862.

396. To Samuel Benjamin Whitfield, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "Improvements in the manufacture of iron bedsteads, and in the manufacture of ornamental iron tubes or columns for the construction and ornamentation of iron bedsteads."

397. To Arthur John Dodson, of Clapham, in the county of Surrey, Civil Engineer, for the invention of "An improved composition for coating, covering, or protecting ships' bottoms, applicable also for coating or covering railway sleepers, telegraphic wires, and other surfaces, and likewise as a cement and as a substitute for metal for certain constructive purposes."

398. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in mounting and fixing the handles or knobs of doors, furniture, and other articles."—A communication to him from abroad by Mr. Félix Hilaire Gallimard, of 29, Boulevart St. Martin, Paris, Commission Agent.

399. To Thomas Duncan McFarlane, of Glasgow, in the county of Lanark, North Britain, Machinist, for the invention of "Improvements in sewing machines."

400. To JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in machinery or apparatus for propelling ships and boats."—A communication to him from abroad by Charles Arnaud and Joseph Labriola, of Paris, in the empire of France.

401. And to WILLIAM FORD SMITH and ARTHUR COVENTRY, of 'Gresley Iron Works,' Ordsal Lane, Salford, in the county of Lancaster, Engineers and Machinists, for the invention of "Improvements in, and applicable to, lathes for turning and cutting screws."

On their several petitions, recorded in the Office of the Commissioners on the 14th day of February, 1862.

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406. To GEORGE HENRY LAW, of 17, Rochester Road, Camden New Town, in the county of Middlesex, Gentleman, for the invention of "Improvements in the construction of steam and other boilers."

408. To CORNELIUS TURNER, of the Airedale Woollen Felt Mills, Leeds, in the county of York, Manufacturer, and JACK SHAW, of the same place, Manager, for the invention of "Improvements in felted fabrics."

412. To RICHARD BUNTING, of Sheffield, in the county of York, Spring Knife Manufacturer, for the invention of "Improvements in the manufacture of bolsters and scales, and in machinery employed therein."

414. To ROBERT BELL, of 41, Westland Row, Dublin, Esquire, for the invention of "Improvements in treating fabrics or articles composed of animal and vegetable substances for the purpose of separating one class from another."

416. And to JOHN GREEN, of Newtown, in the parish of Saint Martin, in the county of Worcester, Farmer, for the invention of "Improvements in the method of and apparatus for signalling, which improvements apply to signals used with steam ploughs or cultivators."

On their several petitions, recorded in the Office of the Commissioners on the 15th day of February, 1862.

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418. To FRANCIS WILLIAM GERISH, of East Road, City Road, in the county of Middlesex, Engineer, for the invention of "Improvements in pumps."

420. And to JOHN HODGKINSON, Cotton Spinner, and DANIEL GREENHALGH, Manager, both of Bolton, in the county of Lancaster, for the invention of "Improvements in machinery or apparatus for preparing or combing cotton, wool, and other fibrous materials."

On both their petitions, recorded in the Office of the Commissioners on the 17th day of February, 1862.

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430. To JOHN LEES, of the Rookery, Salterhebble, near Halifax, in the county of York, for the invention of "An improved trap for catching rats, mice, birds, and other animals alive."

434. And to WILLIAM FIRTH, of Burley, in the borough of Leeds, in the county of York, Merchant, for the invention of "Improvements in machinery for digging or turning up soil."

On both their petitions, recorded in the Office of the Commissioners on the 18th day of February, 1862.

436. To JOHN TOMLINSON PENDLEBURY, Blacksmith, of Elton, near Bury, in the county of Lancaster, and GEORGE PENDLEBURY, Maker-up, of Tottington-lower-end, in the said county, for the invention of "Improvements in machinery for doubling, folding, or plaiting cloth."

440. To WILLIAM BRIDGES ADAMS, of Holly Mount, Hampstead, in the county of Middlesex, Engineer, for the invention of "Improvements in springs and their arrangement for moving and stationary purposes."

444. To WILLIAM DAVIS, of Spencer Road, Stoke Newington, in the county of Middlesex, Oil Refiner, for the invention of "Improvements in increasing the illuminating effect of coal gas and other gases."

446. To JOSEPH GREGORY, of Wellington, in the county of Somerset, for the invention of "Improvements in candlesticks."

448. And to JAMES WILLCOX, of Ludgate Hill, in the city of London, Sewing Machine Manufacturer, for the invention of "Improvements in the manufacture of frills or ruffles, and in the machinery or apparatus employed therein."—A communication to him from abroad by Chauncey Orrin Crosbey, of New Haven, Connecticut, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 19th day of February, 1862.

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450. To JOSEPH FRIEDLAENDER, of White Abbey, in the county of Antrim, Ireland, Civil Engineer, for the invention of "Improvements in machinery for scutching, breaking, and preparing flax, hemp, jute, and other fibrous substances."

454. To ROBERT TAYLOR PRITCHETT, of Saint James' Street, in the city of Westminster, Gun Manufacturer, for the invention of "Improvements in targets or butts."

456. To JAMES PATERSON, of the Middle Temple, in the county of Middlesex, Barrister-at-Law, for the invention of "Improvements in means or apparatus for facilitating the evaporation of saccharine solutions."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada, East.

458. And to Lord ALFRED SPENCER CHURCHILL, of No. 16, Rutland Gate, Hyde Park, in the county of Middlesex, for the invention of "Improvements in electric telegraphs."

On their several petitions, recorded in the Office of the Commissioners on the 20th day of February, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given that the petition of

509. JOHN IMRAY, of No. 65, Westminster Bridge Road, Lambeth, in the county of Surrey, Engineer, praying for Letters Patent for the invention of "Improvements in hinges," was deposited and recorded in the Office of the Commissioners on the 25th day of February, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of LETTERS PATENT which passed the Great Seal on the

28th February, 1862.

2206. ROBERT MCCONNEL, of Glasgow, in the county of Lanark, North Britain, Ironfounder, for an invention of "Improvements in locks."—Dated 5th September, 1861.

2207. JOHN MARTIN ROWAN and THOMAS ROGERS HORTON, both of Glasgow, in the county of Lanark, North Britain, Engineers, for an invention of "Improvements in steam boilers and surface condensers."—Dated 5th September, 1861.

2208. CHARLES EDKINS, Button Manufacturer, of Birmingham, in the county of Warwick, for an invention of "Certain improvements in ladies' dress suspenders."—Dated 5th September, 1861.

2209. JOHN EDWARD RIDGES, Coach Builder, of Wolverhampton, in the county of Stafford, and JAMES BARKER, Coach Body Maker, of Birmingham, in the county of Warwick, for an invention of "Certain improvements in composite carriages for funeral and other purposes."—Dated 5th September, 1861.

2211. PETER EFFERTZ, of the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in machinery or apparatus for making bricks, tiles, drain-pipes, and other similar articles."—Dated 5th September, 1861.

2225. WILLIAM SPENCE, of 50, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in apparatus for dividing and softening vegetable fibres."—A communication to him from abroad by Felix Sorin, of 31, Rue des Fossés, Montmartre, Paris, in the empire of France.—Dated 6th September, 1861.

2231. JOHN BROWN, of Burnley, in the county of Lancaster, Overlooker, for an invention of "Certain improvements in power looms for weaving."—Dated 6th September, 1861.

2237. WILLIAM AINSWORTH, of Adlington, in the county of Lancaster, Weaver, ELLIS HEAP, of the same place, Engine Minder, WILLIAM FIELDING, of the same place, Overlooker, and ELI OPENSHAW, of the same place, Overlooker, for an invention of "Certain improvements in power looms for weaving."—Dated 7th September, 1861.

2238. NICHOLAS DORAN PROBY MAILLARD, of Dublin, in the kingdom of Ireland, for an invention of "Improvements in the material and preparation of the material and apparatus for making potash, pearlash, and caustic potash of commerce."—Dated 7th September, 1861.

2240. GEORGE NORRIS, of Brondesbury Terrace, Kilburn, in the county of Middlesex, Gentleman, for an invention of "Improvements in the manufacture of soap."—Dated 7th September, 1861.

2255. JOHN ANTHONY, of 10, Oxford Terrace, Poplar, in the county of Middlesex, Engineer, for an invention of "Improvements in steam boilers and generators."—Dated 10th September, 1861.

2332. JOHN GURMAN, of Onslow Road, Southampton, in the county of Hants, Builder, for an invention of "Improvements in the fittings and method of hanging window sashes to facilitate their removal for cleaning and other purposes."—Dated 18th September, 1861.

2357. WILLIAM GODLEY CREAMER, of New York, United States of America, and of Woburn Place, in the county of Middlesex, Manufacturer, for an invention of "Improvements in railway brakes and in apparatus for actuating the same."—Dated 20th September, 1861.

2558. WILLIAM MACNAB, of Greenock, in the county of Renfrew, North Britain, Engineer, for an invention of "Improvements in marine steam-engines and boilers."—Dated 14th October, 1861.

2597. CHARLES DENTON ABEL, of 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in apparatus for the simultaneous manufacture of white lead and vinegar."—A communication to him from abroad by Robert Rowland, residing in the city of New York, in the United States of America.—Dated 18th October, 1861.

2669. ENOCH CHAMBERS, of the city of Melbourne, in the colony of Victoria, Ironfounder, for an invention of "The use of hydraulic power for the breaking, crushing, or pulverizing of quartz, blue-stone, or other stone or mineral of any description, and the use of a wrought-iron lever or jaw in machines for crushing quartz or any other mineral, and the use of steel teeth and steel shield pieces for the levers or jaws in such machines."—Dated 25th October, 1861.

2715. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery for enamelling moulded and other surfaces."—A communication to him from abroad by Robert Marcher, of New York, in the United States of America, Manufacturer of prepared mouldings and oval frames."—Dated 29th October, 1861.

2745. MYER MYERS and MAURICE MYERS, trading under the style or firm of Myers and Son, Steel Pen Manufacturers, of Birmingham, in the county of Warwick, and WILLIAM HILL, Manager to the said firm, also of Birmingham aforesaid, for an invention of "Certain improvements in metallic clips or joints for holding, connecting, and adjusting crinolines, and other like purposes."—Dated 1st November, 1861.

2920. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the treatment of zinc ores, and in the apparatus employed therein, which improvements are also applicable to the manufacture of phosphorus."—A communication to him from abroad by Adrien Muller of Paris, in the empire of France, Engineer.—Dated 20th November, 1861.

3197. JOHN REDFERN, of Hanley in the county of Stafford, for an invention of "Improved apparatus for raising the temperature of air, in order to warm churches, conservatories, houses, and other buildings or places."—Dated 20th December, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 26th February, 1862, inclusive.*)

25th February.

513. William McNaught, of Manchester, in the county of Lancaster, Engineer, for an invention of "Certain improvements in steam-engines, particularly applicable to compound steam-engines."—Dated 25th February, 1859.

514. Robert Fielden, junr., of Walsden, in the county of Lancaster, Picker Manufacturer, and Thomas Fielden, of the same place, also Picker Manufacturer, for an invention of "An improvement or improvements in the manufacture of pickers to be used in looms for weaving, and also in the machinery or apparatus to be employed in the manufacture of the same."—Dated 25th February, 1859.

579. John Macmillan Dunlop, of the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in machinery or apparatus for cleaning fibrous materials."—Dated 5th March, 1859.

664. William Avery, of Birmingham, in the county of Warwick, Engineer, for an invention of "Improvements in machinery for the manufacture of screws."—Dated 16th March, 1859.

26th February.

528. George Horner, of Falls Road, Belfast, in the county of Antrim, Ireland, Machinist, for an invention of "Improvements in hackling flax and other fibrous materials, and in machinery for the same."—Dated 28th February, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

15th February, 1862.

445. Henry Constantine Jennings, of 8, Great Tower Street, in the city of London, Practical Chemist, for an invention of "An improvement in the manufacture of soap."— Dated 28th February, 1855.

Errata in Journal of 21st February, 1862.

306. Omit from title the words "applicable also for other purposes."

451. For "Stochr" read "Stoehr," and for "Schloss, Gereath" read "Schloss Gereuth."

FOREIGN PATENTS.



PRUSSIA.*

List of Patents Delivered and Annulled between the 1st and 31st January, 1862.

(*Communicated by His Excellency the Minister of Commerce and Public Works.*)

1. Patents Delivered.

1. Theodor Wulff, of Breslau, for "A water-meter."—5 years.—Dated 8th January, 1862.

2. Dr. Gerold, of Aken, for "A photometer to be used in sick-rooms of persons suffering from eye-diseases."—5 years.—Dated 10th January, 1862.

3. B. Babst, of Berlin, for "A cubing apparatus for liquids reducible to drops."—5 years.—Dated 15th January, 1862.

4. Hugo Vetten, of Raeren, for "Manufacture of glue."—5 years.—Dated 15th January, 1862.

5. Wilh. Eduard Peill and Ernst August Jaeger, of Elberfeld, for "An apparatus in ribbon looms for dividing the warp."—5 years.—Dated 17th January, 1862.

6. Dr. George Lunge, of Breslau, for "An apparatus for scouring wool by means of sulphuret of carbon."—5 years.—Dated 17th January, 1862.

7. Friedrich Tradt, of Dessau, and Wilh. Müller, of Zielenzig, for "A machine for drying wool."—4 years.—Dated 17th January, 1862.

8. Wilhelm Hovemann, of Berlin, for "A smoothing apparatus of lap machines for floss silk."—5 years.—Dated 22nd January, 1862.

9. W. Ballerstedt, of Cologne, for "A controlling apparatus for stills."—5 years.—Dated 24th January, 1862.

10. Julius Casiraghi, for "A peculiar loom."—5 years.—Dated 29th January, 1862.

Patent Annulled.

1. Hermann Fuhst, of Wernigerode, for "A centrifugal drying machine with a self-acting supply of hot air."—5 years.—Dated 3rd May, 1860; annulled 21st January, 1862.

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* For the Prussian Patent Law, see Nos. 313 and 329 of this Journal.

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No. 852. **TUESDAY, MARCH 4, 1862.** **Price 2d.**

Applications for Letters Patent.

(*28th February and 1st and 3rd March*, 1862.)

544. Pierre Destaing Azemar, of Paris, France, Watch Maker, for an invention of "An improved mechanical arrangement for the winding up and the setting of the hands of watches by means of the knob of the pendant."—Dated 28th February, 1862.

545. William Henry Muntz, of Millbrook Lodge, in the county of Hants, Gentleman, for an invention of "Improvements in paddle wheels."—Dated 28th February, 1862.

546. Alexander Woodlands Makinson, of Westminster, in the county of Middlesex, Civil Engineer, and William Fothergill Batho, of Birmingham, in the county of Warwick, Mechanical Engineer, for an invention of "Improvements in locomotive engines."—Dated 28th February, 1862.

547. John Cleophas Ratliff, of Coventry, in the county of Warwick, Ribbon Manufacturer, for an invention of "Improvements in the covers or bindings for books and blotting cases."—Dated 28th February, 1862.

548. George McKenzie, William Fullarton Murray, and John Hamilton, Gentlemen, all of Glasgow, in the county of Lanark, North Britain, for an invention of "Improvements in machinery or apparatus for the manufacture of bobbins or holders for textile materials."—Dated 28th February, 1862.

549. John Pollock, of 27, Bridge Row, in the city of London, Stationer, for an invention of "Improvements in apparatus for protecting trousers from mud."—Dated 28th February, 1862.

550. Jacques Lazare Charcouchet, of Lyons in the empire of France, Civil Engineer, for an invention of "Improvements in machinery for breaking stone."—Dated 28th February, 1862.

551. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the manufacture of hats and bonnets."—A communication to him from abroad by Messieurs Quenot and Lebargy, of Paris, France."—Dated 28th February, 1862.

552. James Parker, of No. 6, Lilford Road, Camberwell, Surrey, Solicitor's Managing Clerk, for an invention of "An improved mode of applying steam as a motive power for propelling vessels and for other purposes."—Dated 28th February, 1862.

553. Thomas Cowburn, of the Safety Valve Works, Little Peter Street, in the city of Manchester, Engineer, for an invention of "Improvements in apparatus for raising and discharging boiling soap, and for dividing the same into bars when congealed."—Dated 1st March, 1862.

554. Thomas Bradford, of the Cathedral Steps, Manchester, in the county of Lancaster, and Fleet Street, London, Washing Machine Manufacturer, for an invention of "Improvements in washing machines for cleansing domestic garments, fibrous materials, and for manufacturing purposes."—Dated 1st March, 1862.

555. James Sim, of the city of Aberdeen, North Britain, Manufacturing Chemist, for an invention of "Improvements in the construction of gas meters."—Dated 1st March, 1862.

556. Henry Charles Müller, of Russell Place, New North Road, in the county of Middlesex, Furrier, for an invention of "Improvements in the manufacture of imitation bear skin caps."—Dated 1st March, 1862.

557. Matthew Dodds, of Bedburn Iron Works, in the parish of Hamsterley, in the county of Durham, Edge Tool Manufacturer, for an invention of "Improvements in machinery for moulding, forming or shaping articles of iron or other malleable

metals, and for shearing or cutting such metals." —Dated 1st March, 1862.

558. Pierre Henri Boyer, of Paris, France, Glove Maker, for an invention of "Improvements in the manufacture of boots and shoes."—Dated 1st March, 1862.

559. Pierre Joseph Guyet, of Paris, in the empire of France, Civil Engineer, for an invention of "Improvements in taps or valves."—Dated 1st March, 1862.

560. Maurice Gabriel and Arnold Gabriel, of 33, Ludgate Hill, in the city of London, and 27, Harley Street, Cavendish Square, in the county of Middlesex, and of Liverpool and Birmingham, for an invention of "Improvements in the bases of artificial teeth."—Dated 1st March, 1862.

561. Sam Hague, of Westwinsted, Litchfield county, in the state of Connecticut, America, but having a temporary residence in the town and county of the town of Nottingham, Cutler, for an invention of "Improvements in machinery or apparatus for raising hammers and stamping with them hot or cold metals."— Dated 1st March, 1862.

562. Adolphe Ernest Ragon, of No. 4, Bernard Street, Russell Square, in the county of Middlesex, for an invention of "Improvements in clectric alarums for telegraphic purposes."—A communication to him from abroad by Pierre Jules Emile Vinay, of 27, Place Dauphine, Paris, in the empire of France.—Dated 1st March, 1862.

563, Andrew Potts, of Cappagh, in the county of Down, Ireland, Farmer, for an invention of "Improvements in machinery or apparatus for scutching and refining flax, hemp, and other vegetable substances."—Dated 1st March, 1862.

564. Palrick Robertson, of Sun Court, Cornhill, in the city of London, for an invention of "Improvements in treating yeast and in the manufacture of ammoniacal salts and a substitute for animal charcoal."—Dated 1st March, 1862.

565. Samuel Godfrey Reynolds, of Bristol, in the state of Rhode Island, in the United States of America, for an invention of "Certain improvements in power spading machines."—Dated 1st March, 1862.

566. Josiah George Jennings, of Holland Street, Blackfriars, in the county of Surrey, Sanitary Engineer, for an invention of "Improvements in the construction of chimneys or flues." —Dated 1st March, 1862.

567. Joseph Bradlee Kendall, of Boston, in the state of Massachusetts, United States of America, for an invention of "An improved horse shoe."—Dated 1st March, 1862.

568. Louis Martin, of Tenison Street, York Road, Lambeth, in the county of Surrey, and Oliver Penfold, of Blackmoor Street, Drury Lane, in the county of Middlesex, for an invention of "An improved candle lamp."—Dated 1st March, 1862.

569. Cornelius Boolds, of South Terrace, Kennington Park, in the county of Surrey, for an invention of "Improvements in fastenings for gloves."—Dated 1st March, 1862.

570. John Whitmore Davis and Francis Davis, both of Hull, in the county of York, for an invention of "Improvements in apparatus for supplying feed water to steam boilers."—Dated 1st March, 1862.

571. Henry Bowen, of Cardiff, in the county of Glamorgan, Gas Engineer, for an invention of "Improvements in gas meters."— Dated 1st March, 1862.

572. Robert Shaw, junr., of Portlaw, in the county of Waterford, Ireland, Cotton Spinner, for an invention of "Facilitating the loading or charging of guns, rifles, fowling pieces, or other fire-arms by a more convenient way of placing the ram rod in position."—Dated 3rd March, 1862.

573. Pierre Rémond, of 39, Rue de l'Echiquier, Paris, in the empire of France, ex-Captain of Gendarmerie, and Knight of the Imperial Legion of Honour, for an invention of "Improvements in double rein bridle bits.—Complete specification. —Dated 3rd March, 1862.

574. Thomas Bell, of Wishaw, in the county of Lanark, North Britain, Manager, for an invention of "Improvements in apparatus for distilling shale and other bituminous mincrals."— Dated 3rd March, 1862.

575. Abraham Sheldon, of Tipton, in the county of Stafford, Furnace Builder, and James Sheldon, of West Bromwich, in the county of Stafford, Furnace Builder, for an invention of "An improvement or improvements in smelting furnaces."—Dated 3rd March, 1862.

576. Joseph Schofield, of the firm of Schofield, Kirk, and Marshall, of Huddersfield, in the county of York, Machine Makers, for an invention of "Improvements in looms for weaving."—Dated 3rd March, 1862.

577. Andrew Tevendale, of Liverpool, in the county of Lancaster, Licensed Victualler, for an invention of "Improvements in the apparatus used in connection with cooking stoves and domestic fire-places for the manufacture and supply of gas."—Dated 3rd March, 1862.

578. Thomas Tillam, of Church Street, Deptford Green, in the county of Kent, Crematine Manufacturer, for an invention of "An improvement in purifying gas."—Dated 3rd March, 1862.

579. Alfred Bedborough, of Southampton, in the county of Hants, for an invention of "Improvements in pillar letter boxes and letter bags." —Dated 3rd March, 1862.

580. Jean Baptiste Andre Quiquandon, of Paris, in the empire of France, Mechanician, for an invention of "Improvements in jacquard machincs, and in the pattern cards to be employed therein."—Dated 3rd March, 1862.

581. Gustav Bischof, junior, of Swansea, for an invention of "Improvements in treating orcs and solutions containing copper and iron or either of them to obtain products thercfrom."—Dated 3rd March, 1862.

582. William Conisbee, of Herberts Buildings, Waterloo Road, Southwark, Engineer and Printing Machine Manufacturer, for an invention of "Improvements in colour printing machines for letter-press or block printing."—Dated 3rd March, 1862.

583. Henry Bunning, of Field House, New Cross, Deptford, in the county of Kent, for an invention of "Improvements in the manufacture of lubricating grease or compounds."—Dated 3rd March, 1862.

584. Frederick Burnett Houghton, of 6, Clarendon Terrace, Kensington, in the county of Middlesex, for an invention of "Improvements in the manufacture of paper."—Dated 3rd March, 1862.

Notices to Proceed.

Notice is hereby given, that

2619. Henry Bloxam, the younger, of Shrewsbury, in the county of Salop, Engineer, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in sights for rifles and ordnance."

As set forth in his petition, recorded in the said office on the 19th day of October, 1861.

2620. And Henry Lamplough, of No. 113, Holborn Hill, in the county of Middlesex, Chemist, has given the like notice in respect of the invention of "Improvements in the means for igniting the wicks of candles and lamp wicks."

2624. And Edward Oldfield, of the firm of Messieurs Oddy and Oldfield, of the Adelphi Iron Works, Salford, in the county of Lancaster, Machine Makers, has given the like notice in respect of the invention of "Improvements in self-acting mules for spinning and doubling."

As set forth in their respective petitions, both recorded in the said office on the 21st day of October, 1861.

2642. And George Archer, of Raunds, in the county of Northampton, Shoemaker, has given the like notice in respect of the invention of "Improvements in sewing boots and shoes."

2646. And Claude Brison and Antoine Chavanne, both of Lyons, France, Gentlemen, have given the like notice in respect of the invention of "Improvements in ovens, kilns, or furnaces for manufacturing or other purposes."

As set forth in their respective petitions, both recorded in the said office on the 23rd day of October, 1861.

2661. And Timothy Morris, Robert Weare, and Edward Henry Cradock Monckton, all of 4, Trafalgar Square (Patent Office), in the county of Middlesex, have given the like notice in respect of the invention of "Improvements in magnets, induction coils, and in insulating wire and metal for electric and other purposes."

2663. And William Dicks, of Floore, in the county of Northampton, Smith, has given the like notice in respect of the invention of "Improvements in water meters."

As set forth in their respective petitions, both recorded in the said office on the 24th day of October, 1861.

2668. And William Wharton, of Birmingham, in the county of Warwick, Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture or construction of springs for railway or other vehicles."

2674. And Edouard Alexandre, Organ Builder, of 2. Rue Sainte Appoline, Paris, France, and of 4, South Street, Finsbury, London, has given the like notice in respect of the invention of "An improved pedal box to be applied to flutinas or small organs, and other similar musical instruments."

2675. And Thomas Moore, of No. 33, Regent Circus, Piccadilly, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in windlasses, and in checking or stopping chains worked thereby."

2677. And Thomas Richardson, of Newcastle-on-Tyne, and Robert Irvine, of Hurlet, Renfrewshire, Analytical Chemist, have given the like notice in respect of the invention of "Improvements in treating bones and gelatine."

2680. And Bernard Joachim La Mothe, of the city and State of New York, in the United States of America, has given the like notice in respect of the invention of "Improvements in the construction of metallic railroad cars and other vehicles."

As set forth in their respective petitions, all recorded in the said office on the 25th day of October, 1861.

2682. And Frederic Barnett, residing at No. 60, St. Mary Axe, in the city of London, has given the like notice in respect of the invention of "Improved electric danger signals for railways and other cognate purposes."

2693. And George Hutton, of Manchester, in the county of Lancaster, Cap Manufacturer, trading under the firm of Beckton and Company, has given the like notice in respect of the invention of "Improvements in hats, caps, and other such coverings for the head."

2694. And William Smith, of Leek, in the county of Stafford, Gentleman, has given the like notice in respect of the invention of "Improvements in the preservation of stone, brick, and other such materials used in building, applicable also to the waterproofing of walls."

As set forth in their respective petitions, all recorded in the said office on the 26th day of October, 1861.

2698. And William Ryder, of Bolton-le-Moors, in the county of Lancaster, Roller and Spindle Maker, and Thomas Ryder, of the same place, Foreman, have given the like notice in respect of the invention of "Improvements in machinery for fluting rollers."

As set forth in their petition, recorded in the said office on the 28th day of October, 1861.

2703. And Oliver Bayliss, of Birmingham, in the county of Warwick, Gun Barrel Maker, has given the like notice in respect of the invention of "Improvements in double sighted double rifle guns, for military and sporting purposes."

2710. And Richard Gibbon, of the Royal Brewery, Brentford, in the county of Middlesex, Brewer, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for preparing grain for brewers."

2711. And John Eaglesfield, of Devizes, in the county of Wilts, Watchmaker, has given the like notice in respect of the invention of "Improvements in gas burners."

2712. And JOHN SAMUEL JACKSON, of Pendleton, in the county of Lancaster, Warehouseman, has given the like notice in respect of the invention of "Improvements in the treatment of woven fabrics known as cords."

2714. And JOHN HAYWARD, of Everton, Liverpool, in the county of Lancaster, has given the like notice in respect of the invention of "Improvements in means or apparatus for raising water or other fluids."

2716. And JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in the preparation or treatment of skins and hides." — A communication to him from abroad by Doctor Friedrich Knapp, of Munich, in the kingdom of Bavaria.

As set forth in their respective petitions, all recorded in the said office on the 29th day of October, 1861.

2719. And MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "Improvements in the construction of horticultural cases." — A communication from Léon Albert Binet, a person resident at Levallois, in the empire of France.

2728. And ALFRED TOPHAM, JOSEPH TOPHAM, and JABEZ TOPHAM, all of St. Pierre-les-Calais, in the empire of France, Lace Manufacturers, have given the like notice in respect of the invention of "Improvements in the manufacture of lace."

As set forth in their respective petitions, both recorded in the said office on the 30th day of October, 1861.

2735. And GEORGE HOLCROFT, of the city of Manchester, Consulting Engineer, has given the like notice in respect of the invention of "Improvements in the construction of blast furnaces for smelting ores."

2736. And LYNALL THOMAS, of No. 9, Union Street, Berkeley Square, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in rifled ordnance and projectiles."

2749. And MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in steam engines and boilers."—A communication to him from abroad by Henry Giffard, of 33, Boulevart Saint Martin, Paris, France.

As set forth in their respective petitions, all recorded in the said office on the 1st day of November, 1861.

2752. And JAMES SMITH BROOKS, of No. 1, Cambridge Villas, Mare Street, Hackney, in the county of Middlesex, has given the like notice in respect of the invention of "A new or improved back or chest protecting brace or braces."

2753. And ALFRED FERNANDEZ YARROW, of Arundel Square, Barnsbury, Engineer, and JAMES BRACEBRIDGE HILDITCH, of Barnsbury Villas, Gentleman, both in the county of Middlesex, have given the like notice in respect of the invention of "Improvements in machinery used when ploughing, tilling, or cultivating land by steam power."

2760. And THOMAS LOCKIE, of Glasgow, in the county of Lanark, North Britain, Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of wrought iron wheels."

2762. And SAMUEL WILLIAM WORSSAM, of King's Road, Chelsea, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in machinery for cutting wood."

As set forth in their petitions, all recorded in the said office on the 2nd day of November, 1861.

2779. And EDWARD BOWRA, of Upper Norwood, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in the manufacture of elastic fabrics."

As set forth in his petition, recorded in the said office on the 5th day of November, 1861.

2789. And FREDERICK HILLS SCHRÖDER, of Hampstead, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in evaporating and in machinery employed therein."

As set forth in his petition, recorded in the said office on the 6th day of November, 1861.

2819. And RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in obtaining alkaline phosphates."—A communication to him from abroad by Edouard Aubertin, of Paris, France.

As set forth in his petition, recorded in the said office on the 9th day of November, 1861.

2841. And WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in skates."—A communication to him from abroad by Daniel Hartwell Shirley, of Boston, in the state of Massachusetts, United States of America.

As set forth in his petition, recorded in the said office on the 12th day of November, 1861.

2850. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "The application of electricity in refining cast iron for the purpose of converting it into wrought iron or steel, with or without the addition of other agents."—A communication to him from abroad by François Alphonse Adéodat Dufournel, of 29, Boulevart St. Martin, Paris, Ironmaster.

As set forth in his petition, recorded in the said office on the 13th day of November, 1861.

2896. And RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in reaping machines." —A communication to him from abroad by Cyrus

Hall McCormick, of Chicago, in the United States of America.

As set forth in his petition, recorded in the said office on the 18th day of November, 1861.

2907. And Benjamin Davenport Godfrey, of Milford, in the county of Worcester, state of Massachusetts, U. S. A., has given the like notice in respect of the invention of "An improved boot or shoe with a wooden shank part and a flexible fore part to the sole."

As set forth in his petition, recorded in the said office on the 19th day of November, 1861.

2918. And Lynall Thomas, of No. 9, Union Berkeley Square, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in the mode of manufacturing and constructing wrought-iron ordnance."

As set forth in his petition, recorded in the said office on the 20th day of November, 1861.

2949. And Eugène Alexandre Rouvière, ainé, of 51, Rue de Malte, Paris, in the empire of France, has given the like notice in respect of the invention of "An improved pump."

As set forth in his petition, recorded in the said office on the 23rd day of November, 1861.

3041. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in pumps."—A communication to him from abroad by Calvin Woodward and George Mills Woodward, both of New York, United States of America,

As set forth in his petition, recorded in the said office on the 4th day of December, 1861.

3191. And Joseph Westwood, of the London Yard, Poplar, in the county of Middlesex, Ship Builder, has given the like notice in respect of the invention of "An improvement in the construction of hydraulic presses."

As set forth in his petition, recorded in the said office on the 20th day of December, 1861.

3221. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "Improved means for reducing the friction and wear of slide valves of steam engines."—A communication to him from abroad by Andrew Buchanan, of Jersey City, state of New Jersey, United States of America.

As set forth in his petition, recorded in the said office on the 24th day of December, 1861.

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192. And Whitmore Baker, of Downham, in the county of Norfolk, Surgeon Dentist, has given the like notice in respect of the invention of "Improvements in fire-arms adapted to prevent their accidental discharge."

As set forth in his petition, recorded in the said office on the 25th day of January, 1862.

217. And John Hunt, of Birmingham, in the county of Warwick, Brassfounder, has given the like notice in respect of the invention of "An improvement or improvements in the manufacture of gas and other chandeliers."

223. And George Henry Morgan and Edward Morgan, both of Grand Junction Terrace, Edgeware Road, in the county of Middlesex, have given the like notice in respect of the invention of "Improvements in carriages."

As set forth in their respective petitions, both recorded in the said office on the 28th day of January, 1862.

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273. And John Hill, of 212, Piccadilly, county of Middlesex, Travelling Equipage Maker, has given the like notice in respect of the invention of "Improvements in the construction of portable chairs and other articles for sitting or reclining on, road, children's, and invalid carriages, ambulances, or vehicles for carrying sick or wounded persons."

As set forth in his petition, recorded in the said office on the 1st day of February, 1862.

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354. And William Macnab, of Greenock, in the county of Renfrew, North Britain, Engineer, has given the like notice in respect of the invention of "Improvements in steam engines."

As set forth in his petition, recorded in the said office on the 11th day of February, 1862.

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380. And William Hewitt, of Birmingham, in the county of Warwick, Manuracturer, has given the like notice in respect of the invention of "Improvements in rein holders."

As set forth in his petition, recorded in the said office on the 13th day of February, 1862.

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412. And Richard Bunting, of Sheffield, in the county of York, Spring-knife Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of bolsters and scales, and in machinery employed therein."

As set forth in his petition, recorded in the said office on the 15th day of February, 1862.

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456. And James Paterson, of the Middle Temple in the county of Middlesex, Barrister-at-Law, has given the like notice in respect of the invention of "Improvements in means or apparatus for facilitating the evaporation of saccharine solutions."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada East.

As set forth in his petition, recorded in the said office on the 20th day of February, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

4th March, 1862.

2213. Frederick Bennett, of Upper Works' Bagillt, in the county of Flint, Manager, for an invention of "An improved method of coating the interior surface of lead and lead composition pipes with tin or its alloys."—Dated 5th September, 1861.

2229. Charles Felton Kirkman, of Palace New Road, Lambeth, for an invention of "Improvements in obtaining manure from sewerage, and in the apparatus employed therein."—Dated 6th September, 1861.

2235. Thomas Goode Messenger, of High Street, Loughborough, in the county of Leicester, Horticultural Builder and Plumber and Glazier, for an invention of "Improvements in glazing horticultural buildings, the roofs of railway stations, and other erections."—Dated 6th September, 1861.

2241. Joseph Holland, of the city of Manchester, Flour Dealer, and George Okell, of Ashton-under-Lyne, Cabinet Maker, both in the county of Lancaster, for an invention of "Improvements in apparatus by which an engine or train is made to give an alarm or signal at any required place, on arriving at or passing any given point on the railway."—Dated 7th September, 1861.

2246. William Simons, of Renfrew, in the county of Renfrew, North Britain, Shipbuilder, for an invention of "Improvements in constructing ships or vessels.—Dated 9th September, 1861.

2249. Alfred Fryer, of St. Anne's Retreat, Sutton, in the county of Lancaster, Clerk, for an invention of "Improvements in propellers and in propeling vessels through water."—9th September, 1861.

2253. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "An improved method of producing mixed-colored woollen and other threads."—A communication to him from abroad by Stanislas Vigoureux, of Reims, France.—Dated 9th September, 1861.

2265. Charles Greaves, of Old Ford, Bow, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in apparatus for preventing waste of water from service pipes or cisterns."—Dated 12th September, 1861.

2269. William Williams Clay, Machinist, in the employ of Mr. John Scott Wells, of Nottingham, Hosiery Manufacturer, for an invention of "Improvements in knitting machinery."—Dated 12th September, 1861.

2275. Paul Dubrule, of the town of Tourcoing in the empire of France, Machine Builder, for an invention of "Improvements in apparatus for manufacturing figured or ornamented stuffs with treadle power looms."—Dated 13th September, 1861.

2286. John Adams Knight, of No. 4, Symonds Inn, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "An improved apparatus for rendering fatty or oleaginous matter, and delivering the same."—A communication to him from abroad by Wellington Lee, Esq., a person resident at No. 197, East 19th Street, New York, United States of America.—Dated 14th September, 1861.

2291. James King, of Rochdale, in the county of Lancaster, Cotton Spinner, and John Sutcliffe, of the same place, Overlooker, for an invention of "Certain improvements in, or applicable to, machines for spinning and doubling."—Dated 14th September, 1861.

2294. Alfred Green, of Stourbridge, in the county of Worcester, General Smith, and William Henry Glover, of Stourbridge aforesaid, General Smith, for an invention of "Improvements in the manufacture of vice boxes."—Dated 14th September, 1861.

2334. James Clough, Foreman in the employ of Messieurs Dobson and Barlow, of Bolton-le-Moors, in the county of Lancaster, Machine Makers, for an invention of "Certain improvements in machinery for preparing cotton and other fibrous substances."—Dated 19th September, 1861.

2398. Godfrey Russell, of Swan Hill, Shrewsbury, in the county of Salop, for an invention of "Spring stretchers or bedsteads for camp, hospital, or general use."—Dated 25th September, 1861.

2411. Samuel Rowsell, of Buckland St. Mary, in the county of Somersetshire, Carpenter, for an invention of "Improvements in horse-rakes."—Dated 27th September, 1861.

2511. Samuel Bremner, of the Belle Sauvage Works, Ludgate Hill, in the city of London, Printer and Engineer, for an invention of "Improvements in the construction of printing machines, and in driving or actuating the same."—Dated 8th October, 1861.

2536. William Edward Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved apparatus for heating the feed water of steam engines."—A communication to him from abroad by Francis Bowes Stevens, of Weehawken, New Jersey, United States of America.—Dated 10th October, 1861.

2543. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the condensers and condensing apparatus of steam engines."—A communication to him from abroad by Francis Bowes Stevens, of Weehawken, New Jersey, United States of America.—Dated 11th October, 1861.

2569. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the condensers and condensing apparatus of steam engines."—A communication to him from abroad by Francis Bowes Stevens, of Weehawken, New Jersey, United States of America.—Dated 15th October, 1861.

2988. Horatio Mearing, of 18, Great Randolph Street, Camden Town, for an invention of "An improved lucifer match and prepared paper for igniting the same."—Dated 27th November, 1861.

3096. Thomas Higgins, of Bow, in the county of Middlesex, Tornographer, for an invention of "Improved machinery for filling dipping clamps with tapers, match stems and splints."—Dated 10th December, 1861.

3252. John Peter Dormay, of Wandsworth, in the county of Surrey, James Shirley Aikenhead, of the same place, Boat Builder, and Thomas Johnson, of the same place, Boat Builder, for an invention of "Improvements in the construction of boats for sailing or rowing."—Dated 30th December, 1861.

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(*To 1st March*, 1862, *inclusive.*)

27th February.

526. James Howden, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in machinery or apparatus for cutting, shaping, punching, and compressing metals."—Dated 28th February, 1859.

539. The Reverend Henry Moule, Clerk, Master of Arts, of Fordington, in the county of Dorset, for an invention of "Improvements in apparatus applicable to the evaporation of sewage or other waters, and for affording heat for other uses."—Dated 1st March, 1859.

810. Francis Morton, of James Street, Liverpool, in the county of Lancaster, Engineer, for an invention of "Improvements in the construction of fences, and the posts or pillars for the same, parts of which improvements are also applicable to the construction of gate posts or poles for telegraph purposes or for signal posts."—Dated 31st March, 1859.

28th February.

531. Collinson Hall, and Collinson Hall, the younger, of Navestock, in the county of Essex, Agriculturalists, for an invention of "Improvements in steam agricultural machinery."—Dated 28th February, 1859.

543. James Templeman, of Glasgow, in the county of Lanark, North Britain, Artificial Fuel Manufacturer, for an invention for "Improvements in the manufacture or production of artificial fuel."—Dated 1st March, 1859.

544. John Pile, of West Hartlepool, in the county of Durham, Ship Builder, for an invention of "Improvements in the construction of floating docks."—Dated 1st March, 1859.

545. David Lichtenstadt, of No. 1, Henry Cottages, Park Road, Peckham, in the county of Surrey, Chemist, for an invention of "Converting certain vegetable substances into fibrous material for the manufacture of paper, textile, and other fabrics."—Dated 1st March, 1859.

1st March.

576. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Editor of the Mechanics' Magazine, and Patent Agent, for an invention of "An improvement in boiler stays."—A communication from Jean Perrier, residing at Nimes, France.—Dated 4th March, 1859.

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(*To 1st March*, 1862, *inclusive.*)

28th February.

454. George Mackay Miller, of Inchicore, county of Dublin, Civil Engineer, for an invention of "Improvements in axles and axle-boxes of engines and carriages in use on railways."—Dated 1st March, 1855.

478. Robert Boby, of Bury Saint Edmunds, Machinist, and Thomas Cooper Bridgman, of the same Borough, in the county of Suffolk, Chemist, for an invention of "Improvements in corn dressing and winnowing machines."—Dated 3rd March, 1855.

1st March.

529. James Bullough, of Accrington, in the county of Lancaster, Manufacturer, for an invention of "Improvements in looms and apparatus for weaving."—Dated 9th March, 1855.

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——— Steam Branch.
——— Deptford Dockyard.
——— Woolwich ditto.
——— Chatham ditto.
——— Sheerness ditto.
——— Portsmouth ditto.
——— Devonport ditto.
——— Pembroke ditto.
Artillery Institute, Woolwich.
Board of Trade, Whitehall.
Ordnance Office, Pall Mall.
——— Small Arms Factory, Enfield.
War Office, Pall Mall.
Government School of Mines, &c., Jermyn St., Piccadilly.
Dublin Castle, Dublin.
Rolls Office, Chancery (Four Courts), Dublin.
Office of Chancery Edinburgh
East India House, Military Stores, Leadenhall Street.
Incorporated Law Society, Chancery Lane, London.

Seats of Learning.

Cambridge University.
Trinity College, Dublin.
Queen's College, Galway.
University College, London.

British Colonies.

Malta.
Cape of Good Hope.
Mauritius.
India—Bengal.
North-West Provinces.
Madras.
Bombay.
Ceylon.
Victoria—Patent Office, Melbourne.
Parliamentary Library, Melbourne.
New South Wales.
South Australia.
Tasmania.
New Zealand.
Newfoundland.
Canada—Quebec.
Toronto.
Montreal.
Nova Scotia.
New Brunswick.
Prince Edward Island.
Antigua.
Barbados.
Jamaica.
Trinidad.
British Guiana.

Foreign States.

Austria—Handels Ministerium, Vienna.
Bavaria—Königliche Bibliothek, Munich.
Belgium—Ministère de l'Intérieur, Brussels.
France—Bibliothèque Impériale, Conservatoire des Arts et Métiers, Hôtel de Ville, Société Industrielle de Mulhouse. } Paris.
Gotha—Ducal Friedenstein Collection.
Hanover—Ministerium des Innern, Hanover.
Netherlands—Ministère de l'Intérieur, The Hague.
Prussia—Handels Ministerium, Berlin.
Russia—Bibliothèque Impériale, St. Petersburg.
Sardinia—Uffizio delle Privative, Turin
Saxony—Polytechnische Schule, Dresden.
Sweden—Stockholm.
United States—The Patent Office, Washington.
The Astor Library, New York.
The State Library, Albany.
The Franklin Institute, Philadelphia.
The Free Library, Boston.
The Philadelphia Library Company.
Wurtemberg—Bibliothek des Musterlagers, Stuttgart.

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THE PATENT LAW AMENDMENT ACTS (15 & 16 Vict., cap. 83; 16 Vict., cap. 5; and 16 & 17 Vict., cap. 115); with the Rules and Regulations made by the Commissioners of Patents for Inventions, and by the Lord Chancellor and the Master of the Rolls, under the Acts 15 & 16 Vict. c. 83, and 16 & 17 Vict. c. 115, accompanied by Specimen Forms of the Provisional Documents Printed on sheets of the prescribed size. Price 6*d.*

Museum of Patents, South Kensington.

NUMBER of VISITORS for the Week ending 1st March, 1862, 3,790.

Since the opening of the Museum Free Daily (May 12, 1858,)—488,265.

THE Museum is opened from 10 A.M. till 10 P.M. Mondays, Tuesdays, and Wednesdays, and from 10 A.M. till 5 P.M. (instead of 4 P.M.) on Thursdays, Fridays, and Saturdays.

After the 1st January, 1862, the Museum will be closed on Wednesday evenings, and opened instead on Saturday evenings, till further notice.

This change will meet the convenience of a large class of engineers, machinists, and others, who in the year 1858 memoralized the Commissioners of Patents for the opening of the Patent Museum on Saturday evenings, a request with which the Commissioners of Patents regretted their inability to comply, owing to difficulties suggested by the Authorities at the South Kensington Museum.

All communications on the subject of the Museum to be addressed to the Superintendent,

B. WOODCROFT.

Great Seal Patent Office,
Southampton Buildings.

GALLERY OF PORTRAITS OF INVENTORS, DISCOVERERS, AND INTRODUCERS OF USEFUL ARTS.—This Collection, formed by Mr. Woodcroft, and first opened to public view in the Great Seal Patent Office in 1853, now constitutes a portion of the Patent Museum at South Kensington.

Presentations of original Portraits, Medallions, Busts, and Statues, in augmentation of the Collection, are hereby invited, and will on receipt be acknowledged in this Journal, and duly recorded in the next published Catalogue.

FIRE-ARMS, PROJECTILES, &c.—The series of Specifications and Drawings on this Subject, from 15th May, 1718, to 31st December, 1853, with Alphabetical and Subject-matter Indexes, may be obtained at the cost price of 9*l.* 18*s.* 6½*d.*

The Indexes, separately, price 3*s.*

REAPING MACHINES.—The entire series of Specifications and Drawings on this subject to the end of 1853, together with an Appendix, prepared by B. Woodcroft, of the Patent Office, and published under the sanction of the Commissioners, may be obtained at the cost price of 2*l.* 3*s.* 11½*d.*

In course of Publication, by Order of the Commissioners of Patents.

ABRIDGMENTS (in Classes, and Chronologically arranged) of all SPECIFICATIONS of PATENTED INVENTIONS, from the earliest enrolled to those published under the Act of 1852.

These books are of 12mo size, and as each is limited to inventions of one class only, they can be sold at prices sufficiently moderate to enable the humblest inventor to examine for himself whether his discovery has been previously patented or not.

At the foot of each abstract are given references to notices of the inventions in scientific and other works, and to the reports of law proceedings for infringements, &c. &c. &c.

The classes already published are,—

1. DRAIN TILES AND PIPES, price 6*d.*
2. SEWING AND EMBROIDERING, price 6*d.*
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The following are in the press:—

PREPARATION OF FUEL, AND APPARATUS FOR ITS COMBUSTION.
STEAM ENGINES.

B. WOODCROFT.

The above, and all other works published by the Commissioners of Patents, are now on sale at the Great Seal Patent Office, 25, Southampton Buildings, Holborn.

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THE

COMMISSIONERS OF PATENTS' JOURNAL.

By Authority.

(*Registered for transmission abroad.*)

No. 853. FRIDAY, MARCH 7, 1862. Price 2d.

Applications for Letters Patent.

(*4th, 5th, and 6th March*, 1862.)

585. JOHN GJERS, of Middlesbrough, in the North Riding of the county of York, Engineer, for an invention of "A material or sand for the formation of moulds for casting iron and for other like purposes."—Dated 4th March, 1862.

586. JAMES ELLIS, of Petersham, in the county of Surrey, Farmer, for an invention of "Fastening chains or any other thing to which it can be attached and of any dimensions."—Dated 4th March, 1862.

587. BRIDGE STANDEN, of Salford, near Manchester, in the county of Lancaster, Chemist, for an invention of "Improvements in the preparation or manufacture of portable manure or fertilising compound, and in the collection or extraction therefrom of a certain liquid applicable to various purposes, and also in machinery or apparatus to be employed therein."—Dated 4th March, 1862.

588. PHILIPP SCHÄFER and FREDERICK SCHÄFER, of Golden Square, in the county of Middlesex, Manufacturers, for an invention of "An improvement in travelling bags, portmanteaus, and other similar bags and cases."—Dated 4th March, 1862.

589. JOHN THOMAS SMITH, of Lee, in the county of Kent, Gentleman, for an invention of "An improved sight for fire arms, applicable also as an apparatus for measuring angles."—Dated 4th March, 1862.

590. WILLIAM TONGUE, of Bradford, in the county of York, Engineer. for an invention of "Improvements in machinery for breaking, rubbing, and scutching flax, hemp, or other vegetable fibrous materials, and in processes for treating silk waste."—Dated 4th March, 1862.

591. ANGELO JAMES SEDLEY, of 210, Regent Street, in the county of Middlesex, for an invention of "Improvements in metallic bedsteads, sofa bedsteads, and folding chairs or seats."—Dated 4th March, 1862.

592. GEORGE HALLEN COTTAM, and HENRY RICHARD COTTAM, both of the St. Pancras Iron Works, Old St. Pancras Road, in the county of Middlesex, for an invention of "Improvements in horticultural buildings and other glazed structures."—Dated 4th March, 1862.

593. THOMAS GREENWOOD, of Leeds, in the county of York, Machine Maker, for an invention of "Improvements in sewing machines."—Dated 4th March, 1862.

594. GEORGE FULLER GUY, of Bury St. Edmonds, in the county of Suffolk, Gentleman, for an invention of "Improvements in electro magnetic motive power engines."—Dated 4th March, 1862.

595. JOHN SIDEBOTTOM, of Harewood, near Mottram, in the county of Chester, Cotton Spinner and Manufacturer, for an invention of "Improvements in fire-arms and ordnance and in projectiles."—Dated 5th March, 1862.

596. WILLIAM TONGUE, of Bradford, in the county of York, Engineer, for an invention of "Improvements in machinery for preparing silk, flax, hemp, or other fibrous materials."—Dated 5th March, 1862.

597. JOHN SOMERVELL and ROBERT MILLER SOMERVELL, both of Netherfield, in the county of Westmoreland, and MARIUS BLANC, of Birmingham, in the county of Warwick, for an invention of "Certain improvements in the manufacture of boots and shoes."—Dated 5th March, 1862.

598. WILLIAM HENSMAN, of Woburn, in the county of Bedfordshire, and WILLIAM HENSMAN, the younger, of Linslade, in the county of Buckinghamshire, Agricultural Engineers, for an invention of "Improvements in apparatus for tilling land by steam power."—Dated 5th March, 1862.

599. John Chubb, of St. Paul's Church Yard, in the city of London, Patent Lock and Safe Manufacturer, and Henry Mortimer Burton, of John's Place, Holland Street, Southwark, in the county of Surrey, Engineer, for an invention of "Improvements in apparatus for displaying or exhibiting jewellery and other valuable articles in glass cases."—Dated 5th March, 1862.

600. Thomas Bostock, of Stone, in the county of Stafford, Boot and Shoe Manufacturer, for an invention of "Improvements in the manufacture of boots and shoes."—Dated 5th March, 1862.

601. Edward Partington, of Heap Bridge, in the county of Lancaster, Manager, for an invention of "Certain improvements in the method of cleansing and preparing rags or other materials used in the manufacture of paper, and in machinery or apparatus connected therewith."—Dated 5th March, 1862.

602. Frederic Newton Gisborne, of No. 3, Adelaide Place, London Bridge, in the city of London, Engineer and Electrician, for an invention of "Improvements in the mode of indicating numerals or letters in railway tickets and other articles by peculiar devices cut therein, and in apparatus for effecting the same."—Dated 5th March, 1862.

603. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved process and apparatus for reducing wood, straw, and other vegetable substances to pulp for the manufacture of paper."—A communication to him from abroad by John Reynolds Knox, of the city and state of New York, United States of America.—Dated 5th March, 1862.

604. Jonathan Barker, of Todmorden, in the county of York, Engineer, Millwright, Iron and Brass Founder, for an invention of "Improvements in, and means or apparatus for, casting drums, pullies, gear, and other wheels and bushes or keys for the same."—Dated 6th March, 1862.

605. George Lawrence, of Newton Terrace, Westbourne Grove, in the county of Middlesex, for an invention of "Improvements in the manufacture of flesh gloves, and flesh straps."—Dated 6th March, 1862.

606. Thomas Hack, of the West Middlesex Water Works, Hammersmith, and Alfred Edwin Carter, of the West Middlesex Water Works, Kensington, both in the county of Middlesex, for an invention of "Improvements in screw cocks." Dated 6th March, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2702. To John Watt, of 35, Lorrimore Street, Walworth, in the county of Surrey, Chemist, and Thomas Snaith Haviside, of 69, Cornhill, in the city of London, Gentleman, for the invention of "Improvements in the manufacture of soap."

On their petition, recorded in the Office of the Commissioners on the 29th day of October, 1861.

126. To Barrow Moss, of Liverpool, in the county of Lancaster, Merchant, for the invention of "The application of steatite, either alone or in combination with other substances, to the manufacture of bricks, fire bricks, the lining of furnaces, and other similar purposes."

On his petition, recorded in the Office of the Commissioners on the 17th day of January, 1862.

356. To William Wood, of Monkhill, Pontefract, in the county of York, for the invention of "Improvements in the process of manufacturing pomfret or liquorice cakes."

On his petition, recorded in the Office of the Commissioners on the 11th day of February, 1862.

384. To Thomas Davison, of Belfast, in the county of Antrim, Ireland, Engineer, for the invention of "Improved means for preventing the corroding of steam boilers."

On his petition, recorded in the Office of the Commissioners on the 13th day of February, 1862.

403. To Thomas Renison, of Glasgow, in the county of Lanark, North Britain, Plumber, for the invention of "Improvements in water closets."

404. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in electro-magnetic time-keepers."—A communication to him from abroad by John Henry Koosen, of Dresden, in the kingdom of Saxony.

407. To Joseph Wall, of Liverpool, in the county of Lancaster, Plumber, and Thomas Dodd, also of Liverpool, aforesaid, Glass Merchant, for the invention of "Improvements in the construction and arrangement of apparatus for regulating the flow or passage of fluids."

409. To Thomas Horsley, of No. 10, Coney Street, York, for an invention of "Improvements in apparatus for turning and closing the cartridges of breech-loading fire-arms."

410. To John Cooke, of Willington, in the county of Durham, Mining Engineer, for an invention of "Improvements in the method of propelling ships and other vessels."

411. To David Dunne Kyle, of Victoria Street, Westminster, for an invention of "An improved method of communicating or signalling in and with railways trains."

413. To John Chatterton, of Highbury, in the county of Middlesex, Engineer, and Willoughby Smith, of Dalston, in the same county, Electrician, for the invention of "Improvements in telegraph cables."

417. And to Jonathan Russell, of Westbury Villa, Camberwell, in the county of Surrey, Master Mariner, for an invention of "Improvements in the method of raising sunken, submerged, or stranded vessels."

On their several petitions, recorded in the Office of the Commissioners on the 15th day of February, 1862.

419. To Hugh Crawford, James Crawford, Robert Crawford, and Robert Templeton, all of Beith, in the county of Ayr, North Britain,

for the invention of "Improvements in looms for weaving."

421. To JOHN WHITAKER, of Leigh, in the county of Lancaster, Agricultural Implement Maker, for the invention of "Improvements in machinery or apparatus for pulping roots."

422. To JAMES JOHN VAN DEN BERG, of the Hague, in the kingdom of the Netherlands, Manufacturer, for the invention of "A new fire lighter."

425. And to JAMES COMBE, of Belfast, for the invention of "Improvements in machinery for winding cops, and in the treatment of cops for warps and other purposes."

On their several petitions, recorded in the Office of the Commissioners on the 17th day of February, 1862.

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427. To JOHN HENRY HASTINGS and JAMES FREEZER, of Holkham, and JOHN WOODS, junior, of Wells, all in the county of Norfolk, for the invention of "Improvements in ploughs."

428. To RICHARD WATKINS, of 14, Lower Belgrave Place, Pimlico, London, for the invention of "Improvements in oil and spirit lamps, and in the means of producing light therein, parts of which improvements are applicable to lamps generally."

431. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in gas apparatus used for lighting cigars and other tobacco."—A communication to him from abroad by Mr. Pierre Duchamp, of 29, Boulevart St. Martin, Paris, Merchant.

432. To MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in cartridges."—A communication to him from abroad by Jules Lemoine, of 34, Rue Saint Paul, Paris, France, Chemist."

433. And to WILLIAM BUSH, of Tower Hill, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in omnibuses and other carriages."

On their several petitions, recorded in the Office of the Commissioners on the 18th day of February, 1862.

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460. To RICHARD HUME SKELLERN, of South Terrace, Hatcham Park, in the county of Surrey, Gentleman, for the invention of "An improved self-inking hand stamp or press."

462. And to JOHN STANDISH, of Egerton, near Bolton, in the county of Lancaster, and JOHN GOODEN, of the same place, for the invention of "Improvements in machinery or apparatus for stripping or cleaning the flats of carding engines."

On both their petitions, recorded in the Office of the Commissioners on the 21st day of February, 1862.

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470. To WILLIAM ASHTON, of Manchester, in the county of Lancaster, Machinist, for the invention of "Certain improvements in machinery or apparatus employed in the manufacture of braids and similar articles."

472. To JAMES KIRKWOOD, of Paisley, in the county of Renfrew, North Britain, Manufacturer, for the invention of "Improvements in looms for weaving."

474. To JOHN MILLINGTON, of Oaken Gates, in the county of Salop, Timber Merchant and Builder, for the invention of "A new or improved hearse or bier."

476. To CHARLES HENRY JULIUS WILLIAM MAXIMILIAN LIEBMANN, of Huddersfield, in the county of York, Merchant, for the invention of "Improvements in felted fabrics suitable for carpets and other similar purposes, and in the apparatus employed therein."

480. To GEORGE BLAKEY, SAMUEL BLAKEY, and JOHN BLAKEY, of Liverpool, in the county of Lancaster, Boot Top and Legging Manufacturers, and BENJAMIN WHITE, of Birkenhead, in the county of Chester, Boot and Shoe Dealer, for the invention of "Improvements in leggings or gaiters."

484. And to MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improvements in burners for heating by gas."—A communication to him from Carsten Richard Meyn, a person resident at Carlshütte, Rendsburg, in the duchy of Holstein.

On their several petitions, recorded in the Office of the Commissioners on the 22nd day of February, 1862.

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486. To GEORGE WEST, of No. 1, Chapel Place, Long Lane, Borough, in the county of Surrey, for the invention of "Improvements in the construction of washing machines."

490. To THOMAS BLAIR, of the city of Carlisle, Tea and Coffee Dealer, for the invention of "Improvements in machinery or apparatus for cutting, chopping, and breaking refined lump sugar and other substances."

492. To THOMAS NESHAM KIRKHAM, of West Brompton, and VERNON FRANCIS ENSOM, of Highgate, both in the county of Middlesex, for the invention of "Improvements in bleaching and dyeing yarn and thread when in the form of cops or otherwise wound."

498. And to WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the joints or chairs of the permanent way of railways."—A communication to him from abroad by Raymond French, of Seymour, Connecticut, and William Goddard, of Boston, Massachusetts, United States of America."

On their several petitions, recorded in the Office of the Commissioners on the 24th day of February, 1862.

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500. To JEREMIAH WOODROW, of Oldham, in the county of Lancaster, Hat Manufacturer, for the invention of "A certain improvement in the manufacture of hats or coverings for the head."

502. To JOHN PIDDINGTON, of No. 52, Gracechurch Street, in the city of London, Patent Agent, for the invention of "An improved machine for shelling or husking all kinds of grain."—A communication to him from abroad by Melchior Nolden, residing at Frankfort on the Maine.

504. And to EDWIN BLISS, of No. 36, Percival Street, Clerkenwell, in the county of Middlesex, Jeweller, and HENRY LAMPLOUGH, of No. 113, Holborn Hill, in the said county of Middlesex, Chemist, for the invention of "Improved means for viewing

microscopic photographs and other minute objects."

On their several petitions, recorded in the Office of the Commissioners on the 25th day of February, 1862.

518. To GEORGE DAVIES, of No 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for the invention of "Improvements in emptying or draining the water from careening docks in maritime ports."—A communication to him from abroad by Pierre Lucien Fontaine, of Paris, Engineer.

520. To AGATHE DÉSIRÉE DUPARET, of Paris, France, Spinster, for the invention of "Improvements in the ornamentation of tissues."

522. To JAMES HENRY BENNETT, of Blackburn, in the county of Lancaster, for the invention of "Improvements in steam generators, and in engines to be worked by atmospheric pressure or steam and air combined."

524. To JOHN CLIFF, of the Imperial Potteries, Lambeth, in the county of Surrey, for the invention of "Improvements in glazing stoneware, red clayware, porcelain, and other kinds of earthenware."

526. To CHARLES LOUIS KNOLL, of 187, Tottenham Court Road, in the county of Middlesex, for the invention of "Improvements in pianofortes."

528. To EDWIN GEORGE BRUZAUD, of Pembroke Road, Kensington, in the employ of Messrs. Erard and Company, of 18, Great Marlborough Street, Harp and Pianoforte Manufacturers, for the invention of "Improvements in pianofortes."

530. And to JOHN MEDHURST, of 53, Lower Queen Street, Rotherhithe, in the county of Surrey, Shipwright, for the invention of "Improvements in apparatus for reefing and furling the top sails, courses, and other square sails of vessels."

On their several petitions, recorded in the Office of the Commissioners on the 26th day of February, 1862.

532. To GEORGE TORR, of Bucks Row, Whitechapel, in the county of Middlesex, and Lower Road, Deptford, in the county of Surrey, Animal Charcoal Manufacturer, for the invention of "Improvements in and an improved apparatus for manufacturing and reburning animal charcoal."

534. To CHARLES CLARK, of 361, City Road, London, for the invention of "Improvements in tea and other trays for the table."

538. To Sir CHARLES TILSTON BRIGHT, of Victoria Street, in the city of Westminster, Civil Engineer, for the invention of "Improvements in electric telegraphs, and in apparatus connected therewith, and employed in the manufacture thereof."

542. And to WILLIAM STUART WOOD, of Larchfield Foundry, Leeds, in the county of York, Engineer, for the invention of "Improvements in valves for regulating the flow of steam, water, or other fluids, and in means or apparatus for working or actuating them direct from the governor, or when worked by expansion cams in connection therewith."

On their several petitions, recorded in the Office of the Commissioners on the 27th day of February, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given, that the petition of

573. PIERRE RÉMOND, of 39, Rue de l'Echiquier, Paris, in the empire of France, ex-Captain of Gendarmerie, and Knight of the Imperial Legion of Honour, praying for Letters Patent for the invention of "Improvements in double rein bridle bits," was deposited and recorded in the Office of the Commissioners on the 3rd day of March, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of LETTERS PATENT which passed the Great Seal on the

7th March, 1862.

2245. GEORGE MALCOLM, of the firm of Malcolm Ogilive, and Co., of Dundee, in the county of Forfar, North Britain, Manufacturer, for an invention of "Improvements in machinery or apparatus for softening or treating jute, hemp, flax, or other similar fibrous substances."—Dated 9th September, 1861.

2248. PATRICK BENIGNUS O'NEILL, of Hart Street, Bloomsbury, in the county of Middlesex, for an invention of "Improvements in screw wrenches or spanners."—Dated 9th September, 1861.

2257. JAMES SMITH, of Sadler's Place, London Wall, in the county of Middlesex, Machinist, for an invention of "Improvements in sewing machines."—Dated 10th September, 1861.

2260. WILLIAM LYNALL THOMAS, of Hill Street, Berkeley Square, in the county of Middlesex, Gentleman, for an invention of "Improvements in projectiles."—Dated 11th September, 1861.

2274. WILLIAM HENRY DELAMARE, of 14, Clarence Place, Hackney Road, in the county of Middlesex, for an invention of "An improved machine for purifying and peeling corn."—Dated 13th September, 1861.

2276. ROBERT SMITH, of Weymouth Cottage, Hornsey, BENJAMIN BROOKS, of 2, Albert Terrace, York Road, King's Cross, and JAMES SMITH, of 2, Oak Villas, Wood Green, Tottenham, all in the county of Middlesex, Builders, for an invention of "Improvements in the construction of roof and other lights."—Dated 13th September, 1861.

2280. THOMAS LAMIE MURRAY, of Paris, in the empire of France, Gentleman, for an invention of "Improved applications of mica previously colored or metallized for letters and signs, decorating churches, rooms, shops, frames, and other ornamental and useful purposes."—A communication to him by Mr. Frederic Holthausen, of Paris, in the empire of France, Artist.—Dated 13th September, 1861.

2288. Richard Waller, of 50, Baker Street, Portman Square, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in machinery and apparatus for manufacturing and refining cane juice, and other saccharine substances."—Dated 14th September, 1861.

2289. William Wheatstone, of 20, Conduit Street, St. George's, Hanover Square, in the county of Middlesex, Musical Instrument Maker, for an invention of "Improvements in concertinas and other musical instruments the tones of which are produced from the vibration of springs."—Dated 14th September, 1861.

2340. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in machinery for the manufacture of fishing and other nets."—A communication to him from abroad by Messrs. Felix Marie Baudouin and Achille Baudouin, Civil Engineers, and Jean Baptiste François Jouannin, Mechanician, all of 29, Boulevart St. Martin, Paris.—Dated 19th September, 1861.

2344. John Graham, of No. 2, Ann Street, Devonport Street, Commercial Road East, in the county of Middlesex, Pattern Maker, for an invention of "An improved double-acting force or lift pump for ships, fire engines, and other purposes."—Dated 19th September, 1861.

2441. Pierre Alexis Francisse Bobœuf, of Paris, in the French empire, Chemist, for an invention of "The preparation and application of certain new hemostatic and antiseptic agents."—Dated 30th September, 1861.

2475. Peter Knowles, Foreman, in the employ of Messieurs Dobson and Barlow, of Bolton-le-Moors, in the county of Lancaster, Machine Makers, for an invention of "Improvements in machinery for opening and cleaning cotton and other fibrous materials."—Dated 4th October, 1861.

2803. Benjamin Dobson, of Bolton-le-Moors, in the county of Lancaster, Machine Maker, and James Clough, of the same place, Foreman, for an invention of "Certain improvements in machinery for combing, preparing, and spinning cotton and other fibrous substances."—Dated 8th November, 1861.

3188. John Smith the younger, of Coven, in the county of Stafford, Engineer and Machinist, and John Birch Higgs, of Coven aforesaid, Engineer and Machinist, for an invention of "Improvements in thrashing machines and in mills for grinding, and in apparatus for raising or moving grain in granaries and other places."—Dated 20th December, 1861.

3260. William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, for an invention of "Improvements in the manufacture of certain descriptions of woven, looped, and bobbin net fabrics by the application of certain fibrous materials thereto."—Dated 31st December, 1861.

3262. William Tongue, of Chryssell Road, Brixton, in the county of Surrey, Engineer, for an invention of "Improvements in the manufacture of umbrellas and parasols."—Dated 31st December, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

4th March 1862.

580. John Leigh of the city of Manchester, in the county of Lancaster, Surgeon, for an Invention of "Improvements in the purification of coal gas."—Dated 5th March, 1859.

584. William Peacock Savage, of Roxham, Downham Market, in the county of Norfolk, for an invention of "An improved machine for excavating, raising, and depositing soil."—Dated 5th March 1859.

601. Adam Booth the elder and Adam Booth the younger, of the city of Manchester, in the county of Lancaster, Machine Makers, for an invention of "Improvements in machinery or apparatus for making or manufacturing tags for laces."—Dated 8th March, 1859.

642. Alfred Tylor, of Warwick Lane, Newgate Street, for an invention of "Improvements in apparatus for regulating the supply of water to waterclosets and other vessels."—Dated 14th March, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

5th March, 1862.

505. William Weild, of the city of Manchester, in the county of Lancaster, Machinist, for an invention of "Improvements in looms or machinery for weaving pile fabrics."—Dated 7th March, 1855.

THE REFERENCE INDEX of PATENTS pointing out the Office in which each enrolled Specification of a Patent may be consulted; the Books in which Specifications, Law Proceedings, and other subjects connected with Inventions have been noticed; also such of the Specifications of Patents granted under the Act of 21 James I. as have been published by the authority of the Commissioners. Price 30*s*.

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FOREIGN PATENTS.

BELGIUM.*

List of Patents of Invention Delivered on the 28th February, 1862.†

(*Communicated by the Belgian Government.*)

(For previous List, see No. 849 of this Journal.)

12,107. E. C. Shepard, represented by A. Van Cutsem, of Brussels, for an imported invention of "Improvements in oil-boxes for locomotives and railway carriages."—Dated 4th February, 1862.—(French Patent, 31st January, 1862.)

12,114. J. Mackean, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in sizing and dressing thread or textile substances."—Dated 5th February, 1862.—(French Patent, 3rd February, 1862.)

12,115. J. B. Gilson and A. Mayolet, of Dampremy, for "A metallic support on an axle for glass-workmen."—Dated 6th February, 1862.

12,116. M. Evrard, of Lodelinsart-Charleroi, for "A furnace for stretching glass."—Dated 7th February, 1862.

12,117. J. L. M. Godin, of Vivegnis-Hermalle, for "Fastening the barrels of breech-loading guns."—Dated 3rd February, 1862.

12,118. N. E. Lardinois, of Liége, a Patent of Improvement for "A kind of projectiles."—Dated 3rd February, 1862.—(Original Patent, 4th January, 1861.)

12,119. F. Dierman-Seth, of Ghent, for "Improvements in machines for beating and cleaning cotton."—Dated 3rd February, 1862.

12,120. P. Clerbois, of Liége, for "A crab with a traction screw for lifting vessels."—Dated 6th February, 1862.

12,121. L. R. Wachter, represented by D. De Vos-Verraert, of Brussels, for an imported invention of "A safety bridle with a lever for compressing the trachea."—Dated 6th February, 1862.—(French Patent, 29th November, 1861.)

12,122. L. R. Wachter, represented by D. De Vos-Verraert, of Brussels, for an imported invention of "Elastic apparatus for preserving and reducing the soft curb in horses."—Dated 6th February, 1862.

12,123. B. L. Fagel, represented by L. Noël, of Brussels, for "Improvements in the manufacture of hats."—Dated 6th February, 1862.

12,124. J. Smal, of Brussels, for "Improvements in carcel lamps with mineral oil."—Dated 6th February, 1862.

12,125. J. Bernard, represented by X. Raclot, of Brussels, for "Improvements in making paper and sizing the pulp."—Dated 6th February, 1862.

12,126. P. Bailly, of Brussels, for "An apparatus for measuring length, and especially tissues and stuffs."—Dated 6th February, 1862.

12,127. L. Guélen, of Xhovémont, Liége, for "Manufacture of a product, being a substitute for chicory."—Dated 8th February, 1862.

12,128. M. Gloesener, of Liége, for "A system of clocks or electro-chronometric counters."—Dated 8th February, 1862.

12,129. The Company of Chemical Ice and Products, represented by H. Henroz, of Floreffe-Fosses, for "Improvements in the manufacture of moulded ice."—Dated 6th February, 1862.

12,130. F. J. Manceau, of Ixelles, a Patent of Improvement for "A safety apparatus applicable to breech-loading fire-arms."—Dated 7th February, 1862.—(Original Patent, 12th January, 1861.)

12,131. A. C. B. Malois, represented by O. Daillencourt, of Brussels, for an imported invention of "A machine for the manufacture of heels of foot-coverings."—Dated 7th February, 1862.—(French Patent, 26th July, 1861.)

12,132. R. Jousse, represented by O. Daillencourt, of Brussels, for an imported invention of "A safety gun."—Dated 7th February, 1862.—(French Patent, 20th July, 1861.)

12,133. The Providence Iron Works, represented by J. Ziane, of Marchienne-au-Pont, for "Improvements in the construction of shafts."—Dated 8th February, 1862.

12,134. E. Vanbellaiengh, of Soignies, for "A kitchen stove with a boiler.—Dated 5th February, 1862.

12,135. G. Vanderrest, of Brussels, for "A screw compass."—Dated 8th February, 1862.

12,136. E. J. Hoorickx, of Brussels, a Patent of Improvement for "Manufacture of coloured lace with relief flowers."—Dated 8th February, 1862.—(Original Patent, 18th January, 1862.)

12,137. C. M. Roullier, represented by D. De Vos-Verraert, of Brussels, for "A strap with joints."—Dated 8th February, 1862.

12,138. C. Kinable, G. W. Percé, and L. Marchal, of Molenbeek St. Jean, for "A machine for extracting ores from mines."—Dated 11th February, 1862.

12,139. C. Schakel, represented by H. Biebuyck, of Brussels, for "A machine for peeling potatoes."—Dated 11th February, 1862.

12,140. J. Dulait, of Charleroi, for "Improvements in coke-kilns."—Dated 12th February, 1862.

12,141. P. J. Gouteaux, of Gilly-Charleroi, for "A parachute without springs, applicable to all kinds of miners' cages."—Dated 12th February, 1862.

12,142. Ed. Van Maele, of Thielt, for "A sowing machine with a centrifugal wheelbarrow."—Dated 13th February, 1862.

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

12,143. P. Dufour and P. Dubrucq, of St. Josse-ten-Noode, for "A pattern of trowsers."—Dated 10th February, 1862.

12,144. A. Dumas and C. Benoit, represented by L. De Meckenheim, of Ixelles, for an imported invention of "A fluorescent lamp for lighting mines."—Dated 10th February, 1862.—(French Patent, 29th August, 1861.)

12,145. L. A. Haton, represented by L. De Meckenheim, of Ixelles, for an imported invention of "An apparatus for sifting corn."—Dated 10th February, 1862.—(French Patent, 12th July, 1861.)

12,146. A. F. Serrin, represented by L. De Meckenheim, of Ixelles, for an imported invention of "A thrashing machine with a horse-gin."—Dated 10th February, 1862.—(French Patent, 21st August, 1861.)

12,147. P. Gardilanne, represenied by L. De Meckenheim, of Brussels, for an imported invention of "Metallic fences woven by machinery."—Dated 10th February, 1862.—(French Patent, 3rd August, 1861.)

12,148. J. Brunt, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvement of gas-meters."—Dated 10th February, 1862.—(French Patent, 8th January, 1862.)

12,149. H. Thomas, of Brussels, a Patent of Improvement for "A heating furnace with a reversed fire, applicable to rolling mills and other works."—Dated 12th February, 1862.—Original Patent, 21st September, 1859.)

12,150. L. J. Chateau, represented by O. Daillencourt, of Brussels, for an imported invention of "A lamp shade with convergent reflection."—Dated 12th February, 1862.—(French Patent, 28th November, 1861.)

12,151. L. J. F. Margueritte and A. Laloüel de Sourdeval, represented by O. Daillencourt, of Brussels, for an imported invention of "A mode of purifying iron, malleable cast-iron, and of cementing iron."—Dated 12th February, 1862.—(French Patent, 18th January, 1862.)

12,152. A. J. Gérard, of Liége, for "A galvanic battery called 'Gas battery.'"—Dated 10th February, 1862.

12,153. E. F. Fraikin, of Liége, for "A moveable bench applicable to circular saws for the manufacture of packing cases."—Dated 14th February, 1862.

12,154. G. Renson-Defooz, of Liége, for "A brick machine."—Dated 14th February, 1862.

12,155. Saint and Co. and Boulay and Co., represented by H. Biebuyck, of Brussels, for an imported invention of "Applying shearings to the manufacture of hat bodies and the interior of hats."—Dated 13th February, 1862.—(French Patent, 8th November, 1861.)

12,156. E. Nugent, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in fire arms."—Dated 13th February, 1862.—(French Patent, 6th February, 1862.)

12,157. J. B. Godin, represented by H. Biebuyck, of Brussels, for an imported invention of "A process for ornamenting cast iron so as to imitate marble, wood, precious stones, &c."—Dated 13th February, 1862.—(French Patent, 10th February, 1862.)

12,158. A. H. Lepay and J. F. J. Cuisinier, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "A process for reviving animal charcoal in the manufacture of sugar and syrup."—Dated 13th February, 1862.—(Original Patent, 27th December, 1861.)

12,159. C. G. Hall, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in the manufacture of boots, shoes, gaiters, &c."— Dated 13th February, 1862. —(English Patent, 24th January, 1862.)

12,160. E. F. Davis, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in gas burners."—Dated 13th February, 1862.—(English Patent, 1st January, 1862.)

12,161. C. F. Morel, represented by E. J. Hoorickx, of Brussels, for "A box or case for violins."—Dated 13th February, 1862.

12,162. A. L. M. Lalieu, of Alost, for "An apparatus for evaporating pharmaceutical products in a vacuum."—Dated 12th February, 1862.

12,163. Tack, Brothers, of Meulebeke, for "Applying a positive tacking-up motion to hand looms for weaving linen."—Dated 15th February, 1862.

12,164. C. L. Duviliers, of Ghent, for "Improvements in sewing machines." — Dated 13th February, 1862.

12,165. J. Bonton, of Laeken, a Patent of Improvement for "A box with a slide closing apparatus without pressure."—Dated 14th February, 1862.—(Original Patent, 5th October, 1861.)

12,166. M. Fromont, of St. Josse-ten-Noode, a Patent of Improvement for "A mode of reducing iron ores."—Dated 14th February, 1862—(Original Patent 22nd December, 1854.)

12,167. A. Leroy, of Brussels, a Patent of Improvement for "Improvements in sewing machines."—Dated 14th February, 1862.—(Original Patent, 27th August, 1861.)

12,168. J. Holland and G. O. Kell, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in apparatus for transmitting signals at the passage of railway trains."—Dated 14th February, 1862.—(French Patent, 10th February, 1862.)

12,169. M. Schaffner, represented by L. Anoul, of Ixelles, a Patent of Improvement for "A furnace for the reduction of zinc ores."—Dated 14th February, 1862.—(Original Patent, 19th January, 1859.)

12,170. G. Jacquemin, represented by V. Jacquemin, of Brussels, a Patent of Improvement for "Improvements in moulds for casting fire grates."—Dated 15th February, 1862.—(Original Patent, 30th November, 1861.)

12,171. J. J. Formage, represented by A. Crooy, of Brussels, for an imported invention of "Rolling mills with vertical cylinders."— Dated 15th February, 1862.— (French Patent, 15th January, 1862.)

12,172. A. Fryer, represented by H. Biebuyck, of Brussels, for an imported invention of "Improve-

ments in propellers and in the mode of propelling vessels."—Dated 15th February, 1862.—(English Patent, 9th September, 1861.)

12,173. F. J. VANDENVINNE, of Brussels, a Patent of Improvement for "Improvements in brick machines."—Dated 15th February, 1862.—(Original Patent, 2nd August, 1860.)

12,174. F. M. DAVID, represented by J. Gillon, of St. Josse-ten-Noode, for "A peculiar beton, and its application to telegraph lines."—Dated 17th February, 1862.

12,175. A. HUMBERT, Brothers, represented by H. Biebuyck, of Brussels, for an imported invention of "Thread balls in boxes."—Dated 17th Febrnary, 1862.—(French Patent, 12th February, 1862.)

12,176. L. FARRENC and H. GLOESNER, represented by H. Biebuyck, a Patent of Improvement for "A carburator with a burner and wick for gas lights."—Dated 17th February, 1862.—(Original Patent, 10th January, 1862.)

12,177. A. H. LEPLAY and J. F. J. CUISINIER, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "A process for reviving animal charcoal in the manufacture of sugar and syrup."—Dated 17th February, 1862.—(Original Patent, 27th December, 1861.)

12,178. H. HONHON, of Verviers, for "Improvements in mounting shuttle boxes."—Dated 17th February, 1862.

12,179. E. L. SIMON, of Jemmapes, for "A process for cleaning steam boilers."—Dated 18th February, 1862.

12,180. E. VALLÉE, of Molenbeek St. Jean, for "Improvements in machines for chasing, cylindering, and boring metals."—Dated 18th February, 1862.

12,181. F. DEKINDRE, represented by A. Calvet, of Brussels, for "An apparatus for washing felt on the paper machine itself whilst at work."—Dated 18th February, 1862.

12,182. CH. ARNAUD and J. LABRIOLA, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in propellers."—Dated 18th February, 1862.—(French Patent, 8th March, 1861.)

12,183. BOYRIVEN, Brothers, represented by A. Crooy, of Brussels, for an imported invention of "A machine for weaving terry lace work."—Dated 18th February, 1862.—(French Patent, 3rd February, 1862.)

12,184. F. DUMEZ and G. FAGÈS, of Péruwelz, for "An hydraulic press for extracting the juice from beetroot and other substances."—Dated 18th February, 1862.

12,185. J. P. BERNABD, of Liége, for "A dry stamp press."—Dated 17th February, 1862.

12,186. J. WIETTE and F. POZIER, represented by E. Gargout, of Liége, for an imported invention of "A machine for drying thistles."—Dated 18th February, 1862.—(French Patent, 18th February, 1862.)

12,187. C. MERTENS, of Brussels, for "A machine for breaking flax and hemp."—Dated 19th February, 1862.

12,188. H. QUESNEL, of St. Josse-ten-Noode, for "A double frame of windows for carriages."—Dated 19th February, 1862.

12,189. V. CARLIER, of Ixelles, for "A tissue being a substitute for cables of mines and sheet iron chains used for extracting beetroot juice."—Dated 19th February, 1862.

12,190. H. C. MEYER, represented by F. Anthoine, of Brussels, for an imported invention of "Means of lessening or augmenting the friction of parts of machinery."—Dated 19th February, 1862.—(French Patent, 30th January, 1862.)

12,191. G. MERTENS, of Alost, for "A bread oven."—Dated 20th February, 1862.

12,192. P. GANIDEL, of Liége, for "Manufacture of common cemented rails."—Dated 20th February, 1862.

COLONIAL PATENTS.—Information as to the Mode of obtaining Protection for Inventions in the Colonies; contained in Communications from the Governors, &c. of the different British Colonies in answer to the Application of Mr. W. J. CURTIS for a Patent. Price 1*s*.

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No. 854. TUESDAY, MARCH 11, 1862. Price 2d.

Applications for Letters Patent.

(*7th, 8th, and 10th March,* 1862.)

607. JOHN GEORGE SHIPLEY, of 181, Regent Street, in the county of Middlesex, Sadler and Army Accoutrement Maker, for an invention of "Improvements in bridle-heads, reins, and bits."—Dated 7th March, 1862.

608. MARCUS BOURNE NEWTON, of Wharf, No. 4, Inside Great Northern Goods Station, King's Cross, N., London, for an invention for "Improvements in the manufacture and construction of junction and other drain pipes in clay or other plastic materials."—Dated 7th March, 1862.

609. THOMAS FARRIMOND, of the city of Manchester, in the county of Lancaster, Mining Engineer, for an invention of "An improved safety cage for mines."—Dated 7th March, 1862.

610. JOSEPH REVELL, of Dukinfield, in the county of Chester, Master Plasterer and Decorator, for an invention of "Improvements in securing the rails of railways and tram ways to the chairs."—Dated 7th March, 1862.

611. JOHN CARPENDALE, Britannia Metal Smith, and THOMAS MIDDLETON, Table Blade Grinder, both of Sheffield, in the county of York, for an invention of "Improvements in means of producing raised chasing on copper, silver, and Britannia metal, by the application of pressure."—Dated 7th March, 1862.

612. JOHN FOWLER, junior, DAVID GREIG, and RICHARD NODDINGS, of Leeds, in the county of York, for an invention of "Improvements in apparatus for cultivating or tilling land."—Dated 7th March, 1862.

613. THOMAS BALL, WILLIAM BALL, and JOHN WILKINS, all of the Broadway, Nottingham, Manufacturers, for an invention of "Improvements in the manufacture of warp fabrics in warp machines."—Dated 7th March, 1862.

614. RICHARD WRIGHT, of 18, Albany Road, Camberwell, in the county of Surrey, for an invention of "Improvements in heating and clarifying saccharine fluids."—Dated 7th March, 1862.

615. ISAAC BROOK, of 62, Basinghall Street, in the county of Middlesex, for an invention for "Improvements in ladies' dresses."—Dated 7th March, 1862.

616. RICHARD RESTELL, of Croydon, in the county of Surrey, Watch Maker, for an invention of "Improvements in apparatuses for connecting and disconnecting carriages and engines on railways, as also signal lines between guard and driver."—Dated 7th March, 1862.

617. THOMAS HENTON WOOD, of Blackweir, in the county of Glamorgan, Gentleman, for an invention of "Improvements in apparatus employed in the manufacture of artificial fuel."—Dated 7th March, 1862.

618. HENRY BENTINCK COATHUPE, of the Junior United Service Club, Saint James's, in the county of Middlesex, Esquire, for an invention of "Improvements in the manufacture of clips, hooks, and other such like fastenings."—Dated 7th March, 1862.

619. ALEXANDER WILLIAM WILLIAMSON, of the University College, in the county of Middlesex, for an invention of "Improvements in apparatus for generating steam, or for generating and superheating steam."—Dated 8th March, 1862.

620. HENRY FLETCHER, of 82, Wood Street, Cheapside, in the city of London, Warehouseman, for an invention of "An improved clip for securing the steel or other expanders of crinolines to the suspenders thereof."—Dated 8th March, 1862.

621. GEORGE EDMONDSON, of Queenswood, in the county of Southampton, for an invention of "Improvements in washing machines."—Dated 8th March, 1862.

622. Amdrew Blair, of the Dawsholm Print Works, in the county of Dumbarton, North Britain, Calico Printer, for an invention of "Improvements in rotatory engines." — Dated 8th March, 1862.

623. William Paterson, William A. Sanderson, and Robert Sanderson, junr., of the firm of R. and A. Sanderson and Co., of Gala Mills, Galashiels, in the county of Selkirk, North Britain, for an invention of "Improvements in finishing woven fabrics."— Dated 8th March, 1862.

624. Sidney Samuel Bromhead, of Bristol, in the county of Gloucester, Ironmonger, for an invention of "Improvements in the construction of boxes or receptacles for coals."—Dated 8th March, 1862.

625. John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for an invention of "Improvements in machinery or apparatus for cleaning from seeds, and for carding cotton, such improvements in carding being also applicable to other fibrous materials."—Dated 8th March, 1862.

626. John Deane, junior, of King William Street, in the city of London, Gun Manufacturer, for an invention of "Improvements in revolving fire-arms."—Dated 8th March, 1862.

627. William Noy Wilkins, of Saint John's Wood, in the county of Middlesex, Artist, for an invention of "Improvements in the manufacture of pigments for oil and water colors."—Dated 8th March, 1862.

628. Pierre Joseph Guyet, of Paris, in the empire of France, Civil Engineer, for an invention of "Improvements in water meters."—Dated 8th March, 1862.

629. Samuel Grice, of Birmingham, in the county of Warwick, Engineer, for an invention of "An improvement or improvements in propellers for propelling ships and boats and other vessels."—Dated 8th March, 1862.

630. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in brims and peaks of hats, caps, and other coverings for the head."—A communication to him from abroad by Jonas Haas, of 29, Boulevart St. Martin, Paris, Hat Manufacturer. — Dated 8th March, 1862.

631. William Palmer, of Bell House, Southwcald, in the county of Essex, for an invention of "Improvements in the manufacture of candles." —Dated 8th March, 1862.

632. John Fleming, of Mincing Lane, in the city of London, for an invention of "Improvements in machinery for pressing cotton."—A communication to him from abroad by Alexander Johnstone, a person resident at Bombay, in the East Indies. —Dated 8th March, 1862.

633. Frederic Newton Gisborne, of No. 3, Adelaide Place, London Bridge, in the city of London, Engineer and Electrician, and Henry Wickens, of No. 4, Tokenhouse Yard, Bank, in the city of London, Gentleman, for an invention of "Improvements in the means of indicating the presence of fire damp or choke damp in mines, and of dispersing fire damp, and also of telegraphing in mines."—Dated 8th March, 1862.

634. Luke Richards Sykes, of New Coventry Street, in the county of Middlesex, for an invention of "Improvements in gloves."—Dated 8th March, 1862.

635, Francis Robert Newton, and Hiram Codd, both of Esher Street, in the city of Westminster, for an invention of "An apparatus for indicating and measuring the flow of liquids."—Dated, 8th Marth, 1862.

636. John James Henry Gebhardt, of Lawrence Lane, in the city of London, Merchant, for an invention of "An improved fastening for albums and other books, bags, reticules, and other articles."—A communication to him from abroad, by Herr Kugler, of Nuremberg in Germany, Manufacturer.—Dated 8th March, 1862.

637. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Certain improvements in breech-loading fire-arms." — A communication to him from Salloum Dahdah, (of Lebanon in Syria), a person resident at St. Maur, (department de la Seine,) France.—Dated 10th March, 1862.

638. James Duncan, of Greenock, in the county of Renfrew, North Britain, Sugar Refiner, for an invention of "Improvements in the manufacture of vinegar."—Dated 10th March, 1862.

639. Charles Massi, of 13, Greville Street, Holborn, in the county of Middlesex, Philosophical Apparatus Manufacturer, for an invention of "Improvements in means and apparatus for retarding and stopping carriages used on railways or common roads."—Dated 10th March, 1862.

640. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in producing by the aid of photography copies of maps, charts, plans, and drawings.—A communication to him from abroad by Arthur Guy Morvan, of Paris, France.—Dated 10th March, 1862.

641. William Parker and George Henry Batman, of Copmanthorpe, in the county of York, for an invention of "Improvements in steam engines."—Dated 10th March, 1862.

642. William Spence, of 50, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in projectiles."—A communication to him from abroad by Ira Wells Shaler, of Brooklyn, in the county of Kings and state of New York, United States.—Dated 10th March, 1862.

643. William John Bennett, of 21a, Millbank Street, in the city of Westminster, Manager, for an invention of "An improved solution or preparation to be used with Portland and other cements for the production of artificial stone, or for building purposes."—Dated 10th March, 1862.

644. Alexander Charles MacLeod, of Hanover Square, in the county of Middlesex, Doctor of Medicine, for an invention of "Improvements in ventilating hats and coverings for the head."—Dated 10th March, 1862.

645. William Samuel Nosworthy, of 79, Coleman Street, in the city of London, Pianoforte Manufacturer, for an invention of "Improvements in upright and horizontal pianofortes."—Dated 10th March, 1862.

646. Andrew Barclay, of Kilmarnock, in the county of Ayr, North Britain, Engineer, for an invention of "Improvements in traction engines, and in apparatus for indicating the pressure of steam."—Dated 10th March, 1862.

647. Jean Baptiste Gabriel Marie Frédéric Piret, of 29, Boulevart St. Martin, Paris, Civil Engineer, for an invention of "Improvements in lubricating apparatus."—Dated 10th March, 1862.

648. John Thomas Calow, of Staveley, in the county of Derby, Manufacturer, for an invention of "A safety apparatus applicable to cages or hoists used in mining or lifting machines."—Dated 10th March, 1862.

649. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "An improvement in preparing hooks and hooks and eyes for sale or consumption."—A communication to him from abroad by the "Société" Gingembre et Damiron, of Paris, France.—Dated 10th March, 1862.

650. Henry Herman Kromschroeder, of 32, Princess Terrace, Regent's Park, in the county of Middlesex, for an invention of "Improvements in gas meters."—Dated 10th March, 1862.

Notices to Proceed.

Notice is hereby given, that

2691. William Taylor, of Newport Pagnell, in the county of Buckingham, Soda Water Manufacturer, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in joints or connections for metal and other pipes and tubes."

As set forth in his petition, recorded in the said office on the 26th day of October, 1861.

2702. And John Watt, of 35, Lorrimore Street, Walworth, in the county of Surrey, Chemist, and Thomas Snaith Haviside, of 69, Cornhill in the city of London, Gentleman, have given the like notice in respect of the invention of "Improvements in the manufacture of soap."

2708. And William Holland Furlonge, of Mark Lane, in the city of London, Merchant, has given the like notice in respect of the invention of "Improvements in the condensation of steam by surface contact."

As set forth in their respective petitions, both recorded in the said office on the 29th day of October, 1861.

2726. And Eugene De Bassano, Gentleman, and Adolphe Brudenne, Civil Engineer, both of Brussels, in the kingdom of Belgium, have given the like notice in respect of the invention of "Improvements in the manufacture of stearine."

As set forth in their petition, recorded in the said office on the 30th day of October, 1861.

2733. And George Norman, of St. Matthias Place, Stoke Newington Green, in the county of Middlesex, Cabinet Manufacturer, has given the like notice in respect of the invention of "Improvements in the mounting of 'cots or cradles.'"

As set forth in his petition, recorded in the said office on the 31st day of October, 1861.

2742. And James Higgins, of Salford, in the county of Lancaster, Machine Maker, and Thomas Schofield Whitworth, of the same place, Manager, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning."

2744. And Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, has given the like notice in respect of the invention of "An improvement or improvements in the manufacture of cast steel, or of homogeneous iron."

As set forth in their respective petitions, both recorded the said office on the 1st day of November, 1861.

2755. And Thomas Walker, Engineer, of 18, Robert Terrace, King's Road, Chelsea, in the county of Middlesex, has given the like notice in respect of the invention of "Certain improvements in the construction of cables or chains for telegraphic and other purposes, and for machinery connected therewith."

2757. And John French, of Manchester Road, Bradford, in the county of York, Mechanic, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for doubling or twisting yarns of worsted or other fibrous substances."

2759. And Samuel Osborne, of Bayswater, in the county of Middlesex, Stay Manufacturer, has given the like notice in respect of the invention of "Improvements in hooped skirts."

2763. And Thomas Spencer, of Prescot, in the county of Lancaster, Earthenware Manufacturer, and Thomas Robinson, of St. Helen's, in the said county, Engineer, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for making pipes and other articles of earthenware, and in the form of pipes for gas sewage and other purposes."—The result partly of a communication from abroad made to them by Alfred Delafol, of Paris, in the empire of France, and partly of invention and discovery made by themselves.

As set forth in their respective petitions, all recorded in the said office on the 2nd day of November, 1861.

2771. And John Ashley, of 13, Grosvenor Place Bath, Doctor of Laws, has given the like notice in respect of the invention of "Improvements in apparatus for attaching horses to carriages."

As set forth in his petition, recorded in the said office on the 4th day of November, 1861.

2772. And Robert Wilson, of Patricroft, near the city of Manchester, Engineer, has given the like notice in respect of the invention of "Certain improvements in steam hammers, and in valves applicable to the same, and to other steam engines."

2775. And William Hall, of Calais, in the empire of France, Lace Manufacturer, has given the like notice in respect of the invention of "Improvements in the production of curved and other forms in articles of lace."

2777. And Richard Fethney, of the city of Manchester, in the county of Lancaster, Machinist, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for preparing, spinning, or doubling cotton, silk, and other fibrous matcrials, parts of which improvements are applicable for winding and other purposes."

As set forth in their respective petitions, all recorded in the said office on the 5th day of November, 1861.

2790. And Frederick George Stuber, of No. 1, St. James's Road, Brixton, in the county of Surrey, has given the like notice in respect of the invention of "An improved hygrometer for measuring the humidity of the atmosphere, dampness of beds, garments, and for other similar purposes."

As set forth in his petition, recorded in the said office on the 6th day of November, 1861.

2801. And John Barrow, of the Dalton Chemical Works, West Gorton, near Manchester, has given the like notice in respect of the invention of "Improvements in the manufacture of benzolc, naptha, napthaline, aniline, and carbolic acid."

As set forth in his petition, recorded in the said office on the 7th day of November, 1861.

2804. And Henry Montucci, Ph. Dr., of 38, Rue du Scntier, Paris, in the empire of France has given the like notice in respect of the invention of "Improvements in apparatus for goffering or embossing stuffs in high relief."

As set forth in his petition, recorded in the said office on the 8th day of November, 1861.

2814. And Robert McNair, of Glasgow, in the county of Lanark, North Britain, Machinist, has given the like notice in respect of the invention of "Improvements in casings for stitching machines, and in adapting the same for writing."

2821. And Edward Loysel, of Cannon Street, in the city of London, Civil Engineer, has given the like notice in respect of the invention of "Improvements in match boxes or cases."

As set forth in their respective petitions, both recorded in the said office on the 9th day of November, 1861.

2834. And William John Hay, of Southsea, in the county of Hants, Experimental Chemist, has given the like notice in respect of the invention of "Improvements in protecting iron and wooden ships, caissons, dams, and other wooden or iron structures from decay, and from fouling by vegetable and animal matters, and in preparing the materials employed therein."

2837. And George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in bleaching cotton and other textile fabrics or materials, and in the apparatus employed in such process."—A communication to him from abroad by Edouard Turpault, of Paris, Bleacher."

As set forth in their respective petitions, both recorded in the saidoffice on the 12th day of November, 1861.

2882. And Joseph Booth, Thomas William Chambers, and James Chambers, all of Bury, in the county of Lancaster, have given the like notice in respect of the invention of "Improvements in looms for weaving."

As set forth in their petition, recorded in the said office on the 16th day of November, 1861.

2996. And Samuel Amphlet, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "An improvement or improvements in ornamenting surfaces."

As set forth in his petition, recorded in the said office on the 27th day of November, 1861.

3015. And Edward Tyer, of 15, Old Jewry Chambers, in the city of London, has given the like notice in respect of the invention of "Improvements in electric telegraphs."

As set forth in his petition, recorded in the said office on the 29th day of November, 1861.

3028. And John Henry Glew, of Howland Street, Fitzroy Square, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for sewing or stitching."

3033. And Watson Duchemin, of Charlottetown, Prince Edward's Island, has given the like notice in respect of the invention of "Improvements in blocks for hoisting."

As set forth in their respective petitions, both recorded n the said office on the 3rd day of December, 1861.

3220. And John Francis Harvey, of 145, Strand, in the county of Middlesex, Manufacturer, has given the like notice in respect of the invention of "Improvements in umbrellas and parasols."

As set forth in his petition, recorded in the said office on the 24th day of December, 1861.

3270. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improved apparatus for obtaining motive power from explosive compounds."—A communication to him from abroad by Eugène Barsanti and Felix Matteucci, of Florence, in the kingdom of Italy.

As set forth in his petition, recorded in the said office on the 31st day of December, 1861.

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99. And James Garth Marshall, of Leeds, in the county of York, Flax Spinner, has given the like notice in respect of the invention of "Improvements in the preparation of flax, hemp, and other fibres, previous to being spun."

As set forth in his petition, recorded in the said office on the 13th day of January, 1862.

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111. And James Garth Marshall, of Leeds, in the county of York, Flax Spinner, has given the like notice in respect of the invention of "Improvements in the machinery and processes for

producing fibre from woven and other textile fabrics."
As set forth in his petition, recorded in the said office on the 14th day of January, 1862.

116. And Henry Duncan Preston Cunningham, of Bury, near Gosport, in the county of Hants, Esq., has given the like notice in respect of the invention of "Improvements in means or apparatus for protecting screw propellers from entanglement, or being fouled by ropes or other bodies, also improvements in means or apparatus for closing up the screw aperture."
As set forth in his petition, recorded in the said office on the 15th day of January, 1862.

162. And William Tozer, of Gracechurch Street, in the city of London, and Archibald Read, of Walworth, in the county of Surrey, have given the like notice in respect of the invention of "Improvements in boots and shoes."
As set forth in their petition, recorded in the said office on the 21st day of January, 1862.

226. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in engines to be employed for pumping or forcing air or water, or for other purposes where a rectilinear motion is required."—A communication to him from abroad by Wellington Lee, of New York, in the United States of America, Engineer.
As set forth in his petition, recorded in the said office on the 28th day of January, 1862.

231. And François Delamare De Boutteville the younger, of Fontaine-le-Bourg, in the department of the Seine Inférieure, in the empire of France, has given the like notice in respect of the invention of "Improvements in machinery applicable to the spinning of fibrous substances."

233. And John McKean, of Walmer Bridge Mills, near Preston, in the county palatine of Lancaster, Manufacturer, and James Gabbott, of the same place, Manager, have given the like notice in respect of the invention of "Improvements in sizing or dressing yarns or textile materials."
As set forth in their respective petitions, both recorded in the said office on the 29th day of January, 1862.

275. And Friedrich Wilhelm Daehne, of Swansea, Glamorganshire, has given the like notice in respect of the invention of "Improvements in furnaces used in the manufacture of zinc."
As set forth in his petition, recorded in the said office on the 1st day of February, 1862.

327. And Alexander McKenzie, of Glasgow, in the county of Lanark, North Britain, Engineer, and Francis Panthel, of the same place, Machinist, have given the like notice in respect of the invention of "Improvements in sewing machines."
As set forth in their petition, recorded in the said office on the 7th day of February, 1862.

355. And William Lyall, of Amiens, in the departement de la Somme, France, has given the like notice in respect of the invention of "Improvements in machinery for preparing flax, hemp, and other fibrous substances."
As set forth in his petition, recorded in the said office on the 11th day of February, 1862.

396. And Samuel Benjamin Whitfield, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of iron bedsteads, and in the manufacture of ornamental iron tubes or columns for the construction and ornamentation of iron bedsteads."
As set forth in his petition, recorded in the said office on the 14th day of February. 1862.

427. And John Henry Hastings and James Freezer, of Holkham, and John Woods, junior, of Wells, all in the county of Norfolk, have given the like notice in respect of the invention of "Improvements in ploughs."
As set forth in their petition, recorded in the said office on the 18th day of February, 1862.

460. And Richard Hume Skellern, of South Terrace, Hatcham Park, in the county of Surrey, Gentleman, has given the like notice in respect of the invention of "An improved self-inking hand stamp or press."
As set forth in his petition, recorded in the said office on the 21st day of February, 1862.

509. And John Imray, of 65, Westminster Bridge Road, Lambeth, in the county of Surrey, Engineer, has given the like notice in respect of the invention of "Improvements in hinges."
As set forth in his petition, recorded in the said office on the 25th day of February, 1862.

538. And Sir Charles Tilston Bright, of Victoria Street, in the city of Westminster, Civil Engineer, has given the like notice in respect of the invention of "Improvements in electric telegraphs, and in apparatus connected therewith, and employed in the manufacture thereof."
As set forth in his petition, recorded in the said office on the 27th day of February, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

11th March, 1862.

2264. William Steevens, of Godolphin Road, Hammersmith, in the county of Middlesex, for an invention of "Improvements in mechanism or apparatus for ploughing and cultivating the land by steam and other power."—Dated 12th September, 1861.

2272. William Davis, of Snow Hill, Birmingham, in the county of Warwick, Dyer, for an invention of "An improved apparatus for the prevention of accidents to vehicles drawn by affrighted horses."—Dated 13th September, 1861.

2273. William Farlar, of Turnham Green, in the county of Middlesex, for an invention of "Improvements in sash fastenings which improvements are also applicable to other purposes."—Dated 13th September, 1861.

2279. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in machines for weighing and measuring corn and other grain."—A communication to him from abroad by Joseph Alexandre Auguste Catenot, of Lyons, France.—Dated 13th September, 1861.

2282. Charles Sutton, of Salford, in the county of Lancaster, Rope and Twine Manufacturer, for an invention of "An improved method of and apparatus for indicating the position of sunken ships' or other vessels."—Dated 13th September, 1861.

2283. Henry Dixon, of Pendleton, in the county of Lancaster, Gentleman, and John Robinson Renner, of Liverpool, in the said county, Artificial Manure Manufacturer, for an invention of "Improvements in the mode of and apparatus for carbonizing sawdust and other vegetable substances."—Dated 13th September, 1861.

2285. George Dixon, of Wood Street, in the city of London, Manufacturer, for an invention of "Improvements in the manufacture of upholsterers' trimmings."—Dated 14th September, 1861.

2292. Frederic Barnett, residing at 60, St. Mary Axe, in the city of London, for an invention of "Improved automatic electric signals to prevent collisions on railroads and railways."—Dated 14th September, 1861.

2303. John Reeves, of the city of New York, in the United States of America, now residing in London, in the county of Middlesex, for an invention of "Improvements in electro-magnetic engines for obtaining and applying motive power."—Dated 16th September, 1861.

2304. Thomas Meriton, of Second Bernard Strasse, Saint Pauli, Hamburgh, for an invention of "Improvements in steering apparatus."—Dated 16th September, 1861.

2308. William Stewart, of Peckham, in the county of Surrey, for an invention of "Improvements in apparatuses for supporting persons in, and for enabling them to progress through, the water."—Dated 16th September, 1861.

2310. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatuses for stretching, supporting, and uniting telegraph wires."—A communication to him from abroad by Charles Pougnaire, of Marseilles, and Joseph Stephane Bourcy, of Paris, both in the empire of France.—Dated 16th September, 1861.

2313. Weston Tuxford, of Boston, in the county of Lincoln, Engineer, for an invention of "Improvements in thrashing machines and in raising and stacking straw and other agricultural produce."—Dated 16th September, 1861.

2345. Samuel Hawksworth, of Doncaster, for an invention of "Improvements in the manufacture of floor-cloth, and in ornamenting other surfaces."—Dated 19th September, 1861.

2389. Joseph Musgrave, of the firm of Messieurs John Musgrave and Sons, of the Globe Iron Works, Bolton-le-Moors, in the county of Lancaster, for an invention of "Certain improvements in the application of steam power."—Dated 25th September, 1861.

2466. Thomas Warwick, of Birmingham, in the county of Warwick, Machinist, for an invention of "An improvement in the manufacture of umbrellas and parasols, and improvements in machinery to be used in the manufacture of umbrellas and parasols."—The same is the result partly of a communication made to him by Charles Augustus Van Kirk, of Philadelphia, in the United States of America, and partly of invention and discovery made by him.—Dated 3rd October, 1861.

2520. George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Enginer and Patent Agent, for an invention of "Improvements in machinery for manufacturing shoes for horses and other animals."—A communication to him from abroad by Thomas Randolph Taylor, of Cleveland, Ohio, in the United States of America.—Dated 9th October, 1861.

2800. William Albert Shepard, of Pall Mall, in the county of Middlesex, for an invention of "Improvemants in preparing and treating gutta percha and india rubber."—Dated 7th November, 1861.

2974. David Ker, of the West of England Soap Works, Plymouth, in the county of Devon, for an invention of "An improvement in the manufacture of soap."—Dated 26th November, 1861.

2997. Henry Wilde, of the city of Manchester, Engineer, for an invention of "Improvements in magneto-electric telegraphs, and in apparatus connected therewith."—Dated 28th November, 1861.

3208. William Mattieu Williams, of Handsworth, in the county of Stafford, Teacher, for an invention of "An improvement or improvements in treating coal and other bituminous minerals and peat in order to obtain solid and liquid hydrocarbons therefrom, and in apparatus to be used for that purpose."—Dated 21st December, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 8th March, 1862, inclusive.*)

6th March.

598. John Pretty Clarke, of King's Street Mills, Leicester, for an invention of "Improvements in the manufacture of reels for the winding on cotton, linen, thread, silk, or other fibrous materials."—Dated 7th March, 1859.

647. Thomas Patstone, of Birmingham, in the county of Warwick, Warehouse Clerk, for an invention of "Improvements in shades or glasses for gas and other lamps, and in the supports of the said shades or glasses."—Dated 14th March, 1859.

7th March.

610. John Allin Williams, of Baydon, in the county of Wilts, Farmer, for an invention of "Improvements in machinery or apparatus for cultivating land by steam power."—Dated 9th March, 1859.

643. Thomas Lightfoot, of Accrington, in the county of Lancaster, Calico Printer, for an invention of "Improvements in fixing colours on woven fabrics or fibrous materials."—Dated 14th March, 1859.

670. Henry Bessemer, of Queen Street Place, New Cannon Street, in the city of London, for an invention of "Improvements in the manufacture of crank axles."—Dated 16th March, 1859.

8th March.

655. John Dixon and Robert Clayton, both of Bradford, in the county of York, Engineers, for an invention of "Improvements in rolling iron and steel for manufacturing railway wheels and for other purposes."—Dated 16th March, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

7th March, 1862.

504. Joseph Cooper, of Birmingham, in the county of Warwick, Brace and Bit Manufacturer, for an invention of "Certain improvements in joiners' braces, and in the mode of forming or partially forming the various bits to be used with such or any other kind of brace."—Dated 7th March, 1855.

538. Samuel Cunliffe Lister, of Manningham, near Bradford, in the county of York, for an invention of "Improvements in machinery for combing wool and other fibres."—Dated 9th March, 1855.

618. William Smith, of Little Woolstone, Fenny Stratford, in the county of Bucks, for an invention of "Improvements in ploughing or trenching and subsoiling land."—Dated 19th March, 1855.

List of Specifications published during the week ending 8th March, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
1885	10*d.*	Robertson, J.—Apparatus for applying heat to the human body.
1886	3*d.*	Hare, Sir J.—Sugar.
1887	1*s.* 4*d.*	Sturrock, G.—Breech-loading fire-arms.
1888	6*d.*	Tolhausen, F.—(*A communication from S. Weil and R. Weil, Brothers.*)—Comforters, necktics, &c.
1889	3*d.*	Busby, W., and Busby, D.—Street rails.
1890	6*d.*	Riley, R.—Fusee signals for railways.
1891	10*d.*	Melrose, W.—Railway wheels.
1892	3*d.*	Guffroy, C. C. J.—Preparing medicinal substances and compounds from the livers of cod, &c.
1893	3*d.*	Scott, W. L.—Dyes.
1894	1*s.* 1*d.*	Joynson, E. H.—Disintegrating, &c. vegetable fibres.
1895	3*d.*	Hall, P.—Drilling machine.
1896	3*d.*	Saunderson, T.—Imitation medals for advertising.
1897	10*d.*	Bradford, T.—Washing, churning, wringing, and mangling machines.
1898	1*s.*	Ash, W. H.—(*A communication from N. Coones.*)—Reaping and mowing machines.
1899	10*d.*	Cressey, T. S.—Machinery for the manufacture of casks.
1900	3*d.*	Parkes, A.—Sheathing metal.
1901	3*d.*	Allen, M.—Construction of buildings, &c.
1902	3*s.* 8*d.*	Hart, J. M.—Locks or fastenings.
1903	3*d.*	Potter, H.—Treating or preparing textile materials and fabrics.
1904	1*s.* 5*d.*	Holland, H. J., and Payton, W.—Breech-loading fire-arms.
1905	1*s.* 11*d.*	Wood, A.—Refrigerating storehouse, &c.
1906	10*d.*	Flanders, J. F.—Machinery for splitting or shaving leather or skins, &c.
1907	5*d.*	Rylands, J., Rylands, T. G., and Rylands, P.—Joining wire for telegraphic conductors, &c.
1908	3*d.*	Walduck, H. J.—Retarding and stopping railway engines, &c.
1909	3*d.*	Browne, B.—(*A communication from T. B. Hubbell.*)—Self-acting tap for gas, &c.
1910	3*d.*	Mearing, H.—Lucifer match, &c.
1911	3*d.*	Harrison, R.—Apparatus for cutting slates and slabs.
1912	5*d.*	Shaw, H.—Wet gas meters.
1913	3*d.*	Powell, A.—(*A communication from C. W. Bryant.*)—Boots and shoes, &c.
1914	7*d.*	Mojgridge, E. J.—Washing machines.
1915	3*d.*	Cook, J.—Smoke-consuming furnaces.
1916	10*d.*	Pratt, M.—Candle moulds.
1917	3*d.*	Edwards, G.—Propelling on railways, &c.
1918	7*d.*	Wright, J.—(*A communication from A. Wibaux.*)—Carding cotton, &c.
1919	10*d.*	Benton, R.—Obtaining rotary motion.
1920	3*d.*	Turner, F. W.—Obtaining and applying the motive power of steam.
1921	10*d.*	Drouot, J. E.—Kneading machines.

List of Specifications—*continued.*

No.	Price.	Name of Patentee and Subject-Matter.
1922	7*d.*	Newton, W. E.—(*A communication from A. Howe.*) — Machinery for cloaning rice, coffee, &c.
1923	3*d.*	Tomlinson, E., and Wilson, G. W. C. —Extinguishing fires in buildings.
1924	3*d.*	Bish, G., and Dredge, J.—Forming bends or curves in pipes.
1925	10*d.*	Merryweather, M., and Merryweather, R. M.—Pumps, &c.
1926	5*d.*	Cross, J. — Fastenings for wearing apparel.
1927	1*s.* 2*d.*	Jones, G. F., and Jones, J.—Protecting and arranging water pipes.
1928	1*s.*	Schinz, C.—Glass furnaces.
1929	7*d.*	De Ponton d'Amécourt, G. L. M. Viscount.—Aerostatic apparatus.
1930	3*d.*	Habert, P.—Circular loom.
1932	7*d.*	O'Hanlon, P.—Marine and other steam boilers.
1933	7*d.*	Vavasseur, J.—Machine for rifling cannon.
1934	5*d.*	Prince, A.—(*A communication from J. Mittelhaus.*) — Palate and tooth plates.
1935	3*d.*	Newton, W. E.—(*A communication from P. Morin.*)—Coloring matters or pigments.
1936	4*s.* 2*d.*	Lewis, J. — Producing and treating printing surfaces, &c.
1937	6*d.*	Richmond, F., Chandler, H., and Ritchie, W. B.—Sack holder.
1938	3*d.*	Burn, C. — Fastening ships' armour plates.
1939	7*d.*	Meyer, H. C.—Slide valves.
1940	3*d.*	Fitch, S. S.—Chest expander.
1941	6*d.*	Johnson, E. D. — Centre seconds watches.
1942	10*d.*	Potter, J.—Straining pillars or posts for fencing.
1943	1*s.* 1*d.*	Brooman, R. A.—(*A communication from A. T. Baudrit.*) — Locks and other fastenings, and keys.
1944	10*d.*	Seiler, F. — Overleaping differential levels.
1945	6*d.*	Mennons, M. A. F.—(*A communication from A. G. Vanzuylen.*)—Furnace grates.
1946	3*d.*	Petit, J. A.—Watches and clocks.
1947	3*d.*	Mennons, M. A. F.—(*A communication from J. P. Tajan.*)—Elixir.
1948	1*s.* 4*d.*	Galloway, W., Galloway, J., and Wilson, J. W.—Steam boilers, &c.
1949	3*d.*	Potts, G.—Elastic steel mattresses.
1950	7*d.*	Wappenstein, R.—Cop tube and cover for rollers used in spinning, &c.
1951	3*d.*	Turner, J., and Dunnett, R. B.—Stamping, endorsing, and embossing machines.
1952	6*d.*	Tolhausen, F.—(*A communication from F. Berger.*)—Increasing the effect of motive power.
1953	7*d.*	MacMorran, J.—Mincing machines.
1954	3*d.*	Cowper, E. A.— Protecting ships of war and land batteries from the effects of projectiles.
1955	7*d.*	Damoiseau, A. A. R.—Apparatus for drawing blood, &c.
1956	8*d.*	Clark, W.—(*A communication from E. T. De Gemini and E. O. De Gemini.*) —Bleaching and clarifying saccharine matters, &c.
1957	7*d.*	Newton, A. V. — (*A communication from T. Rainey.*)—Reversible seats.
1958	3*d.*	Spence, P., and Mellor, J.— Separating copper from its ores.
1959	7*d.*	Silveston, F.—Watches.
1960	6*d.*	Richards, W. H.—Combined knife, fork, and spoon.

*** Specifications will be forwarded by post on receipt of the amount of price and postage (the latter rarely exceeding One Penny). Sums exceeding 5*s.* must be remitted by Post Office Order, made payable at the Post Office, Holborn, to Mr. Bennet Woodcroft, Great Seal Patent Office.

Museum of Patents, South Kensington.

Number of Visitors for the Week ending 8th March, 1862, 3,914.

Since the opening of the Museum Free Daily (May 12, 1858,)—492,179.

THE Museum is opened from 10 A.M. till 10 P.M. on Mondays, Tuesdays, and Saturdays (instead of Wednesdays), and from 10 A.M. till 5 P.M. on Wednesdays, Thursdays, and Fridays.

This change will meet the convenience of a large class of engineers, machinists, and others, who in the year 1858 memoralized the Commissioners of Patents for the opening of the Patent Museum on Saturday evenings, a request with which the Commissioners of Patents regretted their inability to comply, owing to difficulties suggested by the Authorities at the South Kensington Museum.

All communications on the subject of the Museum to be addressed to the Superintendent,

B. Woodcroft.

Great Seal Patent Office,
Southampton Buildings.

Gallery of Portraits of Inventors, Discoverers, and Introducers of Useful Arts. —This Collection, formed by Mr. Woodcroft, and first opened to public view in the Great Seal Patent Office in 1853, now constitutes a portion of the Patent Museum at South Kensington.

Presentations of original Portraits, Medallions, Busts, and Statues, in augmentation of the Collection, are hereby invited, and will on receipt be acknowledged in this Journal, and duly recorded in the next published Catalogue.

This Journal is published on the evening of Tuesday and Friday, and will be forwarded, post free, to Subscribers. — Terms, 30*s.* per annum. — Subscriptions received at the Great Seal Patent Office, where also single copies, at twopence each, may be obtained.

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THE

COMMISSIONERS OF PATENTS' JOURNAL.

By Authority.

(*Registered for transmission abroad.*)

No. 855. FRIDAY, MARCH 14, 1862. Price 2d.

Applications for Letters Patent.

(*11th, 12th, and 13th March*, 1862.)

651. Robert Peacock, of the firm of Messrs. Peacock and Prattley, of the city of Manchester, Manufacturers and Printers, for an invention of "Improvements in the manufacture of window blinds."—Dated 11th March, 1862.

652. Jean Nadal, Mechanist, of 14, Brooke's Market, Brooke Street, Holborn, in the city of London, for an invention of "A portable fountain for water or other liquids."—Dated 11th March, 1862.

653. Edward Parfitt, of Drury Lane, in the county of Middlesex, Wine Merchant, for an invention of "A watch protector."—Dated 11th March, 1862.

654. William Barter, of Brixham, in the county of Devon, Master Mariner, for an invention of "Improvements in apparatus for propelling vessels, and for enabling them to work off lee shores during storms."—Dated 11th March, 1862.

655. Edward Humphrys, of Deptford, in the county of Kent, Engineer, for an invention of "Improvements in steam engines."—Dated 11th March, 1862.

656. Olivier Kerautret and Jules Kerautret, of No. 15, Passage des Petites Ecuries, in the city of Paris and empire of France, for an invention of "Improvements in the construction of buildings, by the use of which hewn stone and faced bricks are dispensed with in some parts thereof."—Dated 11th March, 1862.

657. Edwin Gillard Camp, of the city of Bristol, Hair Dresser, for an invention of "Improvements in brushes or apparatus for brushing."—Dated 11th March, 1862.

658. Collinson Hall, of Navestock, in the county of Essex, Agriculturalist, for an invention of "Improvements in implements for breaking up the soil, and in ropes and drums to be employed in the cultivation of the soil by steam."—Dated 11th March, 1862.

659. Thomas Barnes Wilson, of Queen's Ferry, in the county of Flint, and William Wilson, of Preston, in the county of Lancaster, both Managers, for an invention of "Improvements in means or apparatus for the splitting of cane and other fibrous substance."—Dated 11th March, 1862.

660. Henry Baynes, of the firm of Henry Baynes and Son, Stationers, of Clements Lane, in the city of London, for an invention of "An improvement in bankers' cheque books."—Dated 11th March, 1862.

661. Richard Smith, of Glasgow, in the county of Lanark, North Britain, Manufacturing Chemist, for an invention of "Improvements in telegraph posts."—Dated 11th March, 1862.

662. George Davies, of No. 1, Serle Street, Lincolns Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improvements in attaching artificial teeth to plates and to each other, and in moulds for forming artificial teeth."—A communication to him from abroad by Abraham Merritt Asay, and Jacob Lambert Asay, both of the city of Philadelphia, Pennsylvania, in the United States of America."—Dated 11th March, 1862.

663. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in apparatus for effecting submarine operations."—A communication to him from abroad by Mr. Olivier Riou, of 29, Boulevart St. Martin, Paris, Merchant.—Dated 11th March, 1862.

664. Alphonse Rene Le Mire de Normandy, of Odin Lodge, King's Road, Clapham Park, in the county of Surrey, for an invention of "Improvements in connecting gas and other pipes."—Dated 12th March, 1862.

665. Alexander James Russell, of Edinburgh, in Scotland, Clerk to the Signet, for an invention of "Improvements in the arrangement of the electric conductors for submarine telegraphs."—A communication to him from abroad by Francis Bensa and Windham Charles James Anstruther, of Florence, in Italy. — Dated 12th March, 1862.

666. John Fawcett, of New Swindon, in the county of Wilts, Smith, for an invention of "Certain improvements in the manufacture of cranks and crank axles for locomotive and other engines."—Dated 12th March, 1862.

667. William Henry Latham, of Bolton, in the county of Lancaster, Foreman, and Frederick Cartwright Ward Latham, of the same place, Printer, for an invention of "Certain improvements in machinery or apparatus for perforating and numbering paper or other substances to be employed as 'tickets' or where other 'counter registration' is required."— Dated 12th March, 1862.

668. William Henry Latham, of Bolton, in the county of Lancaster, Foreman, and Frederick Cartwright Ward Latham, of the same place, Printer, for an invention of "Certain improvements in machinery or apparatus for cutting paper, pasteboard, and other similar substances."—Dated 12th March, 1862.

669. Archibald Watson, of Glasgow, in the county of Lanark, North Britain, Plumber and Brassfounder, for an invention of "Improvements in hot pressing apparatus."— Dated 12th March, 1862.

670. John Johnson, of Heaton Norris, in the county of Lancaster, and Samuel Morris, of Stockport, in the county of Chester, for an invention of "Improvements in steam boilers."—Dated 12th March, 1862.

671. William Conyers, of Leeds Bridge, Leeds, in the county of York, Currier and Leather Merchant, for an invention of "Improvements in currying leather."—Dated 12th March, 1862.

672. Echlin Molyneux, junior, of Seavien, Enniskerry, in the county of Wicklow, Ireland, for an invention of "An improved method of utilizing the waste heat of the products of combustion as they escape from a furnace, and securing a more complete combustion of the fuel."—Dated 12th March, 1862.

673. Paul Gondolo, of 29, Boulevart St. Martin, Paris, in the empire of France, Merchant, for an invention of "A new or improved baking oven."—Dated 12th March, 1862.

674. Arthur Martin A'Beckett, of Surbiton, in the county of Surrey, F.R.C.S., for an invention of "Improvements in railway signal apparatus."—Dated 12th March, 1862.

675. William Clark of 53 Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the manufacture of coloured inks."—A communication to him from abroad by Mr. Annet Jacques Nadaud, of 29, Boulevart St. Martin, Paris, Merchant.—Dated 12th March 1862.

676. Frederick Tolhausen Civil Engineer and Patent Agent, of No. 17 Rue du Faubourg Montmartre, Paris, for an invention of "A new toy which he denominates 'The colorimixt top.'"—A communication to him from Jean Marie Charles Martin, Esq., a person resident at No. 12, Rue Neuve des Martyrs, Paris.—Dated 12th March 1862.

677. John Edwin Grisdale, of 73, Oxford Street, in the county of Middlesex, Photographer, for an invention of "Improvements in photographic cameras, and the mode of fixing the lens therein." Dated 12th March 1862.

678. Edward Gerard Fitton, of Ardwick, in the county of Lancaster, Machinist, for an invention of "Improvements in machinery for winding yarn or thread on to bobbins or spools."—Dated 12th March 1862.

679. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of cartridges."—A communication to him from abroad by Elam Potter, and Julius Pomeroy, both of the city and state of New York, United States of America.—Dated 12th March 1862.

680. James Saul Henry, of Essex Street, Strand, in the county of Middlesex, Butler to the Honourable Society of the Inner Temple, for an invention of "An improvement in the construction of chimneys and chimney pots."—Dated 13th March, 1862.

681. Fortune Hippolyte Fontaine, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, for an invention of "A process of reproducing all sorts of photographies, drawings, paintings, and engravings, engraved on metal which he calls 'Chalcopantographie.'"—Dated 13th March, 1862.

682. Lucien Vidie, of Paris, France, Gentleman, for an invention of "Improvements in the construction of aneroid barometers, partly applicable to steam gauges."—Dated 13th March, 1862.

683. John Cunningham and Robert Cunningham, both of Paisley, in the county of Renfrew, North Britain, Card Perforators, for an invention of "An improved ornamental fabric, and improvements in weaving and in jacquard apparatus."—Dated 13th March, 1862.

684. John Hunter, Manager of Dalmellington Iron Works, in the county of Ayr, North Britain, for an invention of "Improvements in apparatus for removing slag from furnaces."—Dated 13th March 1862.

685. Godfrey Ermen, of Manchester, in the county of Lancaster, Sewing Thread Manufacturer, for an invention of "An improved receptacle or case for the protection of threads, of cotton, silk, or other fibrous substances when in a 'spooled,' 'balled,' or otherwise wound state, or for the reception of 'tapes.'"—Dated 13th March, 1862.

686. Henry Fletcher, Engraver and Mechanician, of Market Street, Manchester, in the county of Lancaster, for an invention of "Improvements in cleaning and preparing cotton, and the machinery used for that purpose."—Dated 13th March, 1862.

687. James Wadsworth, of Salford, near Manchester, in the county of Lancaster, Machinist, for

an invention of "Improvements in the construction and manufacture of moveable or adjustable heels for boots and shoes."—Dated 13th March, 1862.

688. John Howard and John Bullough, of Accrington, in the county of Lancaster, Iron Founders and Machine Makers, for an invention of "Improvements in warping and beaming machines."—Dated 13th March, 1862.

689. Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention of "Improvements in furnaces for consuming smoke."—A communication to him from abroad by Napoléon Félix Boruko de Chodzko and Jean Louis Lebeaux, of Paris.—Dated 13th March, 1862.

690. Séverin Virgile Bonneterre, Charles Théodore Erhart, and Jules Ferdinand Monti, all of 91, Rue de Malte, Paris, in the empire of France, for an invention of "An improved apparatus for regulating the pressure of steam in steam boilers and the combustion in their furnaces."—Dated 13th March, 1862.

691. Michael Henry, of 84, Fleet Strect, in the city of London, Patent Agent, for an invention of "Improvements in stuffing boxes."—A communication to him from abroad by Francisque Million, of 33, Boulevard Saint Martin, Paris, France.—Dated 13th March, 1862.

692. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatuses for measuring and regulating the flow and pressure of gas, parts of which are applicable to hydraulic receivers and to steam generators."—A communication to him from abroad by Jean Claude Garnier, of Paris, France.—Dated 13th March, 1862.

693. George Calvert, of Islington, in the county of Middlesex, Ironmonger, for an invention of "Improvements in castors."—Dated 13th March, 1862.

694. Samuel Kearsley Thompson, of Coniston, in the county of Lancaster, Engineer, and Arthur Thomas Thompson, of Bolton-le-Moors, in the county of Lancaster, Engineer, and Samuel Mawson, of Bolton-le-Moors, in the county of Lancaster, Surgeon Dentist, for an invention of "Improvements in railway apparatuses for communicating between guard and driver, and for coupling and uncoupling the carriages, parts of which apparatuses are applicable to connecting pipes and tubes."—Dated 13th March, 1862.

695. Joseph Bennett Howell, of the firm of Shortridge, Howell, and Co., Steel Manufacturers, of Sheffield, in the county of York, for an invention of "Improvements in the manufacture of chains and chain cables."—Dated 13th March, 1862.

696. Henry Fletcher, of 82, Wood Street, Cheapside, in the city of London, Warehouseman, for an invention of "Improvements in neck ties, scarfs, cravats, and collars."—Dated 13th March, 1862.

697. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improvement in armour plates for vessels of war."—A communication to him from abroad by Edward Cox, of Covington, state of Kentucky, United States of America.—Dated 13th March, 1862.

698. Edward Bolton, of Warrington, in the county of Lancaster, Glass Manufacturer, for an invention of "Improved apparatus for transferring liquid matters from one vessel to another."—Dated 13th March, 1862.

699. Rudolph Schomburg, of No. 90, Cannon Street, in the city of London, and Adolph Baldamus, of Charlottenburg, in the city of Berlin, in the kingdom of Prussia, for an invention of "Improvements in purifying illuminating gas."—Dated 13th March, 1862.

700. John Kent, of Moscow, in the kingdom of Russia, Hosier, for an invention of "Improvements in cleansing and bleaching."—The result partly of a communication from abroad made to him by Theodor Schnebely, a person resident at Moscow aforesaid, and partly of invention and discovery made by himself.—Dated 13th March, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

72. To Robert Johnson, of Liverpool, in the county of Lancaster, Master Mariner, for the invention of "An improved composition for coating the bottoms of iron ships to prevent their fouling, and which composition may be used as a protective coating for wood, iron, or other substances exposed to the action of sea water."

On his petition, recorded in the Office of the Commissioners on the 10th day of January, 1862.

128. To Julius Cæsar Dickey, of Saratoga Springs, county of Saratoga and state of New York, United States of America, for the invention of "An improved quartz crusher."

On his petition, recorded in the Office of the Commissioners on the 17th day of January, 1862.

227. To William Irlam, of the Gibraltar Iron Works, Newton Heath, near the city of Manchester, Engineer, for the invention of "Improvements in the construction of railway crossings and turntables."

On his petition, recorded in the Office of the Commissioners on the 28th day of January, 1862.

237. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in machinery for puddling metals."—A communication to him from abroad by François Dumeny and Firmin Lemut, both of Closmortier, near St. Dizier, France.

On his petition, recorded in the Office of the Commissioners on the 29th day of January, 1862.

251. To Alexandre César Barnabé Malois, Boot Maker, at Paris, in the empire of France, and of 29, Boulevart St. Martin, for the invention

of "Improvements in the manufacture of boot and shoe heels, and in machinery to be used therein,"
On his petition, recorded in the Office of the Commissioners on the 30th day of January, 1862.

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350. To WILLIAM HENRY WEAVER, of Edington, Bridgenorth, in the county of Salop, Agricultural Engineer, and CHARLES GALL, of Bridgenorth, in the said county, Engineer, for the invention of "Improvements in machinery for cultivating, ploughing, harrowing, or scarifying the land."

351. To THOMAS FYFE, of 46, Leicester Square, in the county of Middlesex, Engineer, for the invention of "Improvements in knapsacks and in apparatus for supporting them or other similar burdens upon the shoulders."

359. And to RICHARD JOHNSON, of Manchester, in the county of Lancaster, Wire Drawer, for the invention of "Improvements in welded wires used for telegraphic and other purposes."
On their several petitions, recorded in the Office of the Commissioners on the 11th day of February, 1862.

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375. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in projectiles."—A communication to him from abroad by James Woodbury and Solomon Gray, both of Boston, county of Suffolk and state of Massachusetts, United States of America.

377. To JOHN PETERS, of Ulverston, in the county of Lancaster, Engineer, for the invention of "Improvements in portable steam engines applicable to locomotive, stationary, and marine engines."

379. To WILLIAM WILLIAMS, of Bath, in the county of Somerset, Pianoforte Maker, for the invention of "Improvements in pianofortes."

381. To ALFRED CHARLES EBBUTT, Upholsterer, of 25, Blackman Street, Boro'-of Southwark, and 20, 33, and 34, High Street, Croydon, in the county of Surrey, for the invention of "Improvements in reclining, easy, and other chairs."

385. And to FRANCIS FALCONER, of Glasgow, in the county of Lanark, North Britain, Warehouseman, for the invention of "Improvements in glasses for lamps."
On their several petitions, recorded in the Office of the Commissioners on the 13th day of February, 1862.

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405. To WILLIAM AVERY, of the firm of James and Sons, of Birmingham, in the county of Warwick, Screw Manufacturers, for the invention of "Improvements in machinery for the manufacture of screws, a part or parts of which improvements may also be used in the manufacture of pins, rivets, and nails."
On his petition, recorded in the Office of the Commissioners on the 15th day of February, 1862.

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423. To EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for the invention of "An improved method of, and apparatus for, collecting the gases given off from furnaces."—A communication to him from abroad by Emil Langen, of Siegburg, in the kingdom of Prussia, Engineer.

424. And to THOMAS BIRDSALL, of Leeds, in the county of York, Chemist, and JAMES BIRDSALL, of the same place, Tanner for the invention of "Improvements in preparing hides or skins for tanning."
On both their petitions, recorded in the Office of the Commissioners on the 17th day of February, 1862.

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429. To CHARLES DENIS SÉGOFFIN, of 2, Rue Sainte-Appoline, Paris, France, and of 4, South Street, Finsbury, London, for the invention of "An improved apparatus for the purpose of viewing photographs on cards."
On his petition, recorded in the Office of the Commissioners on the 18th day of February, 1862.

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437. To HENRY BERNOULLI BARLOW, of the city of Manchester, Patent Agent, for the invention of "Improvements in carding or otherwise preparing cotton and other fibrous materials and in machinery employed therein."—A communication to him from abroad by Sixte Pierre Villain, of Paris, in the empire of France, Engineer.

438. To JAMES NASMYTH, of 31, Rue de l'Etoile, Brussels, in the kingdom of Belgium, Civil Engineer, for the invention of "Improvements in apparatus for obtaining a circular motive power."

442. To JAMES TURNER, of 194, Upper Thames Street, in the city of London, Baker, for the invention of "Improved machinery for mixing, mincing, and pounding materials to be used in the preparation of food."

443. To WILLIAM HINTON, of Greville Street, Holborn, in the county of Middlesex, Barometer Manufacturer, for the invention of "Improvements in barometers."

445. To JAMES PATERSON, of the Middle Temple, in the county of Middlesex, Barrister-at-Law, for the invention of "Improvements in means or apparatus for re-burning animal charcoal."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada East.

447. And to GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the county of Surrey, for the invention of "Improved modes of protecting iron boilers, tanks, and vats from wear arising from galvanic action."—A communication to him from abroad by John Welton Wilcox, a person resident at West Roxbury, in the county of Norfolk and state of Massachusetts, in the United States of America.
On their several petitions, recorded in the Office of the Commissioners on the 19th day of February, 1862.

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449. To GEORGE FREDERICK LEE, of New Bridge Street, in the city of London, Solicitor, for the invention of "An improvement in tourniquets."—A communication to him from abroad by Thomas Scott Lambert, of New York, in the United States of America.

453. To JOSEPH BLEASDALE, Roller Manufacturer, and FREDERICK WILLIAM BORLAND, Mechanic, both of Accrington, in the county of Lancaster, for the invention of "Improvements in fluted rollers for preparing and spinning fibrous materials and in the mode of manufacturing the same."

455. To JAMES PATERSON, of the Middle Temple, in the county of Middlesex, Barrister-at-Law, for the invention of "Improvements in the use of animal charcoal."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada, East.

457. And to CHARLES WOOD, of Bramford, in the county of Suffolk, Engineer, for the invention of "Improvements in horse rakes."

On their several petitions, recorded in the Office of the Commissioners on the 20th day of February, 1862.

461. To HENRY WARD, of Castle Bromwich, in the county of Warwick, Farmer, for the invention of "An improvement or improvements in ladies' saddles."

463. To WILLIAM HAMER, of Little Lever, near Bolton, in the county of Lancaster, Cotton Spinner, for the invention of "Improvements in apparatus employed in the preparation of cotton and other fibrous materials."

464. To EDWARD SMITH CREASE, of No. 17, Gracechurch Street, in the city of London, Mining Engineer, for the invention of "Improved machinery for drilling, boring, or excavating rock or other earthy substances."

466. And to JOSEPH KRASUSKI, of 29, Boulevart St. Martin, Paris, in the empire of France, Professor, for the invention of "An improved apparatus for controlling fiery horses."

On their several petitions, recorded in the Office of the Commissioners on the 21st day of February, 1862.

473. To AUGUSTUS BORNEMANN, of No. 29, Monmouth Street, in the city and borough of Bath, Cabinet Manufacturer, for the invention of "Improvements in the mode of constructing fountains."

477. To JAMES TOWNEND, of Bradford, in the county of York, Machinist, for the invention of "Improvements in jacquard engines."

479. To DAVID BLAIR WHITE, of the town and county of the town of Newcastle-upon-Tyne, Doctor of Medicine, for the invention of "Improvements in apparatuses for protecting liquids from the atmosphere while remaining in and during their discharge from the vessels containing the same."

481. To GEORGE JOHN ORAM, of 19, Wilmington Square, in the county of Middlesex, Watch Manufacturer, for the invention of "A revolving pendant for giving greater security to watches and lockets against theft."

483. And to WILLIAM BECKET JOHNSON, of Manchester, in the county of Lancaster, Consulting Engineer, for the invention of "Improvements in steam engines."

On their several petitions, recorded in the Office of the Commissioners on the 22nd day of February, 1862.

485. To WILLIAM JOHNSTON, of Glasgow, in the county of Lanark, North Britain, Metal Merchant, for the invention of "Improvements in gas and other lamps and stoves."

487. To JOHN CUNNINGHAM and ROBERT CUNNINGHAM, both of Paisley, in the county of Renfrew, North Britain, Card Perforators, for the invention of "An improved ornamental fabric, and improvements in weaving and in jacquard apparatus."

488. To JOHN COOPE HADDAN, of Bessborough Gardens, Pimlico, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in small arms and in artillery, and in projectiles for artillery."

491. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in apparatus for feeding or supplying steam boilers with water."—A communication to him from abroad by Messrs. François Pradel and François Théobald Wahl, Engineers, both of 29, Boulevart St. Martin, Paris.

493. To PERCY GRAHAM BUCHANAN WESTMACOTT, of Newcastle-upon-Tyne, Civil Engineer, for the invention of "Improvements in constructing and applying armour plating to ships, vessels, and forts."

495. To LEWIS DAVIS, of Gloucester Gardens, Hyde Park, in the county of Middlesex, Esquire, and FREDERICK MAJOR PARKES, of Marylebone Road, in the said county, Gentleman, for the invention of "An improvement in the production or manufacture of gas for lighting and heating."

496. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in reaping and mowing machines."—A communication to him from abroad by Marie Pierre Amaranthe Ferdinand Mazier, of Laigle, France.

497. And to FREDERICK ST. GEORGE SMITH, of Drogheda, Ireland, of the firm of Thomas Grendon and Co., Engineers, for the invention of "Improvements in machinery for grinding or reducing quartz, bones, grain, and other substances."—The result partly of a communication from abroad made to him by Edward Furber, of New York, in the United States of America, and partly of invention and discovery made by himself.

On their several petitions, recorded in the Office of the Commissioners on the 24th day of February, 1862.

503. To JOHN PIDDINGTON, of No. 52, Gracechurch Street, in the city of London, Patent Agent, for the invention of "Improved condensing apparatus adapted for high pressure steam engines, especially locomotive engines."—A communication to him from abroad by William Winter, of Charlottenburg, near Berlin, in the kingdom of Prussia.

505. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in tobacco pipes."—A communication to him from abroad by Mr. Paul Ambroise Doury, Proprietor, of 29, Boulevart St. Martin, Paris.

506. To THOMAS WATSON, of Thornton, nea Bradford, in the county of York, Overlooker, and ROBERT DRACUP, of the same place, Mechanic, for the invention of "Improvements in means or apparatus for preparing and combing wool and other fibres."

511. To WILLIAM MCINTYRE CRANSTON, of 58, King William Street, in the city of London, for the invention of "Improvements in machinery for

reaping and mowing."—The result partly of a communication made to him from abroad by Walter Abbott Wood, a person resident at Hoosiek Falls, Reusselaer County, New York, United States of Ameriea, and partly of invention and discovery made by himself.

512. To COURTENAY KINGSFORD, of Fenchurch Street, in the city of London, Merchant, for the invention of "A new composition for the manufacture of bread."

513. To PIERRE JOSEPH GUYET, of Paris, in the empire of France, Civil Engineer, for the invention of "An improved coupling for uniting pipes between locomotives and tenders, applicable also to the coupling of other pipes."

514. And to HARRY WHITESIDE COOK, of Manchester, in the county of Lancaster, a Minor, for the invention of "An improved mode of and apparatus for propelling carriages and vehicles by means of electricity."

On their several petitions, recorded in the Office of the Commissioners on the 25th day of February, 1862.

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515. To JOHN BOOCOCK and THOMAS DAVENPORT, both of Bury, in the county of Lancaster, Mechanics, for the invention of "Improvements in machinery for preparing, spinning, and doubling cotton and other fibrous materials."

517. To ALEXANDER STEPHEN, junior, of Glasgow, in the county of Lanark, North Britain, Ship Builder, for the invention of "Improvements in the construction of ships or vessels."

523. To THOMAS KING and ROBERT VARVILL, of Liverpool, in the county of Lancaster, Merchants, for the invention of "Improvements in apparatus for controlling the flow of fluids for flushing water-closets."

525. To WILLIAM MILLER, of Upper Stamford Street, Blackfriars, in the county of Surrey, for the invention of "Improvements in the manufacture of sugar."

527. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the clasps or fastenings of braeelets, neck chains, and other articles of jewellery."—A communication to him from abroad by Messrs. Eugène Fauche and Charles Auguste Ravant, both of 29, Boulevart St. Martin, Paris, Manufacturing Jewellers.

529. To WILLIAM PEACOCK SAVAGE, of Roxham, Downham, Norfolk, for the invention of "Improvements in fire-arms."

531. And to JOHN SMITH, senior, of Coven, near Wolverhampton, for the invention of "Improvements in drying wheat and other grain."

On their several petitions, recorded in the Office of the Commissioners on the 26th day of February, 1862.

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535. To WILLIAM ARMAND GILBEE, of No. 4, South Street, Finsbury, in the county of Middlesex, Patent Agent, for the invention of "Improvements in the construction of fire grates for steam and other boilers, and suitable to all kinds of fires."—A communication to him from abroad by De Vos-Verraert, of Brussels, in the kingdom of Belgium.

536. To WILLIAM SMITH, of Salisbury Street, Adelphi, for the invention of "Improvements in the method of making cigaretts, and in the apparatus and materials to be employed therein."—A communication to him from abroad by M. Lemaire-Daimé, of Andresy, in the empire of Franee.

537. To JAMES TANGYE, of the firm of Tangye, Brothers, and Priec, of Birmingham, in the county of Warwick, Manufacturers, for the invention of "An improvement or improvements in hydraulic lifting jacks."

539. To THOMAS BRAY, of Dewsbury, in the county of York, for the invention of "Improvements in ornamenting wood in imitation of inlaid work."

541. To JOHN ROBERT FOSTER, of Winsley Street, Oxford Street, in the county of Middlesex, Trimming Manufacturer, for the invention of "Improvements in the manufacture of bullion-fringe or cord."

543. And to JOSEPH REVELL, of Dukinfield, in the county of Chester, Master Plasterer and Decorator, for the invention of "Improvements in oil cans."

On their several petitions, recorded in the Office of the Commissioners on the 27th day of February, 1862.

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544. To PIERRE DESTAING AZEMAR, of Paris, France, Watch Maker, for the invention of "An improved mechanical arrangement for the winding up and the setting of the hands of watches by means of the knob of the pendant."

545. To WILLIAM HENRY MUNTZ, of Millbrook Lodge, in the county of Hants, Gentleman, for the invention of "Improvements in paddle wheels."

546. To ALEXANDER WOODLANDS MAKINSON, of Westminster, in the county of Middlesex, Civil Engineer, and WILLIAM FOTHERGILL BATHO, of Birmingham, in the county of Warwick, Mechanical Engineer, for the invention of "Improvements in locomotive engines."

547. To JOHN CLEOPHAS RATLIFF, of Coventry, in the county of Warwick, Ribbon Manufacturer, for the invention of "Improvements in the covers or bindings for books and blotting cases."

548. To GEORGE MCKENZIE, WILLIAM FULLARTON MURRAY, and JOHN HAMILTON, Gentlemen, all of Glasgow, in the county of Lanark, North Britain, for the invention of "Improvements in machinery or apparatus for the manufacture of bobbins or holders for textile materials."

549. To JOHN POLLOCK, of 27, Budge Row, in the city of London, Stationer, for the invention of "Improvements in apparatus for protecting trousers from mud."

550. To JACQUES LAZARE CHARCOUCHET, of Lyons, in the empire of France, Civil Engineer, for the invention of "Improvements in machinery for breaking stone."

552. And to JAMES PARKER, of No. 6, Lilford Road, Camberwell, Surrey, Solicitor's Managing Clerk, for the invention of "An improved mode of applying steam as a motive power for propelling vessels and for other purposes."

On their several petitions, recorded in the Office of the Commissioners on the 28th day of February, 1862.

553. To Thomas Cowburn, of the Safety Valve Works, Little Peter Street, in the city of Manchester, Engineer, for the invention of "Improvements in apparatus for raising and discharging boiling soap, and for dividing the same into bars when congealed."

554. To Thomas Bradford, of the Cathedral Steps, Manchester, in the county of Lancaster, and Fleet Street, London, Washing Machine Manufacturer, for the invention of "Improvements in washing machines for cleansing domestic garments, fibrous materials, and for manufacturing purposes."

557. To Matthew Dodds, of Bedburn Iron Works, in the parish of Hamsterley, in the county of Durham, Edge Tool Manufacturer, for the invention of "Improvements in machinery for moulding, forming or shaping articles of iron or other malleable metals, and for shearing or cutting such metals."

558. To Pierre Henri Boyer, of Paris, France, Glove Maker, for the invention of "Improvements in the manufacture of boots and shoes."

560. To Maurice Gabriel and Arnold Gabriel, of 33, Ludgate Hill, in the city of London, and 27, Harley Street, Cavendish Square, in the county of Middlesex, and of Liverpool and Birmingham, for the invention of "Improvements in the bases of artificial teeth."

561. To Sam Hague, of Westwinstead, Litchfield county, in the state of Connecticut, America, but having a temporary residence in the town and county of the town of Nottingham, Cutler, for the invention of "Improvements in machinery or apparatus for raising hammers and stamping with them hot or cold metals."

562. To Adolphe Ernest Ragon, of No. 4, Bernard Street, Russell Square, in the county of Middlesex, for the invention of "Improvements in electric alarums for telegraphic purposes."—A communication to him from abroad by Pierre Jules Emile Vinay, of 27, Place Dauphine, Paris, in the empire of France.

563. To Andrew Potts, of Cappagh, in the county of Down, Ireland, Farmer, for the invention of "Improvements in machinery or apparatus for scutching and refining flax, hemp, and other vegetable substances."

564. To Patrick Robertson, of Sun Court, Cornhill, in the city of London, for the invention of "Improvements in treating yeast and in the manufacture of ammoniacal salts and a substitute for animal charcoal."

565. To Samuel Godfrey Reynolds, of Bristol, in the state of Rhode Island, in the United States of America, for the invention of "Certain improvements in power spading machines."

566. To Josiah George Jennings, of Holland Street, Blackfriars, in the county of Surrey, Sanitary Engineer, for the invention of "Improvements in the construction of chimneys or flues."

567. To Joseph Bradlee Kendall, of Boston, in the state of Massachusetts, United States of America, for the invention of "An improved horse shoe."

568. To Louis Martin, of Tenison Street, York Road, Lambeth, in the county of Surrey, and Oliver Penfold, of Blackmoor Street, Drury Lane, in the county of Middlesex, for the invention of "An improved candle-lamp."

569. To Cornelius Boolds, of South Terrace, Kennington Park, in the county of Surrey, for the invention of "Improvements in fastenings for gloves."

570. To John Whitmore Davis and Francis Davis, both of Hull, in the county of York, for the invention of "Improvements in apparatus for supplying feed water to steam boilers.'

571. And to Henry Bowen, of Cardiff, in the county of Glamorgan, Gas Engineer, for the invention of "Improvements in gas meters."

On their several petitions, recorded in the Office of the Commissioners on the 1st day of March, 1862.

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574. To Thomas Bell, of Wishaw, in the county of Lanark, North Britain, Manager, for the invention of "Improvements in apparatus for distilling shale and other bituminous minerals."

575. To Abraham Sheldon, of Tipton, in the county of Stafford, Furnace Builder, and James Sheldon, of West Bromwich, in the county of Stafford, Furnace Builder, for the invention of "An improvement or improvements in smelting furnaces."

576. To Joseph Schofield, of the firm of Schofield, Kirk, and Marshall, of Huddersfield, in the county of York, Machine Makers, for the invention of "Improvements in looms for weaving."

577. To Andrew Tevendale, of Liverpool, in the county of Lancaster, Licensed Victualler, for the invention of "Improvements in the apparatus used in connection with cooking stoves and domestic fire-places for the manufacture and supply of gas."

579. To Alfred Bedborough, of Southampton, in the county of Hants, for the invention of "Improvements in pillar letter boxes and letter bags."

580. To Jean Baptiste Andre Quiquandon, of Paris, in the empire of France, Mechanician, for an invention of "Improvements in jacquard machines, and in the pattern cards to be employed therein."

581. To Gustav Bischof, junior, of Swansea, for the invention of "Improvements in treating ores and solutions containing copper and iron or either of them to obtain products therefrom."

582. To William Conisbee, of Herberts Building, Waterloo Road, Southwark, Engineer and Printing Machine Manufacturer, for the invention of "Improvements in colour printing machines for letter-press or block printing."

583. To Henry Bunning, of Field House, New Cross, Deptford, in the county of Kent, for the invention of "Improvements in the manufacture of lubricating grease or compounds."

584. And to Frederick Burnett Houghton, of 6, Clarendon Terrace, Kensington, in the county of Middlesex, for the invention of "Improvements in the manufacture of paper."

On their several petitions, recorded in the Office of the Commissioners on the 3rd day of March, 1862.

587. To Bridge Standen, of Salford, near Manchester, in the county of Lancaster, Chemist, for the invention of "Improvements in the preparation or manufacture of portable manure or fertilising compound, and in the collection or extraction therefrom of a certain liquid applicable to various purposes, and also in machinery or apparatus to be employed therein."

588. To Philipp Schäfer and Frederick Schäfer, of Golden Square, in the county of Middlesex, Manufacturers, for the invention of "An improvement in travelling bags, portmanteaus, and other similar bags and cases."

589. To John Thomas Smith, of Lee, in the county of Kent, Gentleman, for the invention of "An improved sight for fire arms, applicable also as an apparatus for measuring angles."

590. To William Tongue, of Bradford, in the county of York, Engineer, for the invention of "Improvements in machinery for breaking, rubbing, and scutching flax, hemp, or other vegetable fibrous materials, and in processes for treating silk waste."

591. To Angelo James Sedley, of 210, Regent Street, in the county of Middlesex, for the invention of "Improvements in metallic bedsteads, sofa-bedsteads, and folding chairs or seats."

593. To Thomas Greenwood, of Leeds, in the county of York, Machine Maker, for the invention of "Improvements in sewing machines."

594. And to George Fuller Guy, of Bury St. Edmonds, in the county of Suffolk, Gentleman, for the invention of "Improvements in electro-magnetic motive power engines."

On their several petitions, recorded in the Office of the Commissioners on the 4th day of March, 1862.

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596. To William Tongue, of Bradford, in the county of York, Engineer, for the invention of "Improvements in machinery for preparing silk, flax, hemp, or other fibrous materials."

600. To Thomas Bostock, of Stone, in the county of Stafford, Boot and Shoe Manufacturer, for the invention of "Improvements in the manufacture of boots and shoes."

602. And to Frederic Newton Gisborne, of No. 3, Adelaide Place, London Bridge, in the city of London, Engineer and Electrician, for the invention of "Improvements in the mode of indicating numerals or letters in railway tickets and other articles by peculiar devices cut therein, and in apparatus for effecting the same."

On their several petitions, recorded in the Office of the Commissioners on the 5th day of March, 1862.

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604. To Jonathan Barker, of Todmorden, in the county of York, Engineer, Millwright, Iron and Brass Founder, for the invention of "Improvements in, and means or apparatus for, casting drums, pullies, gear, and other wheels and bushes or keys for the same."

606. And to Thomas Hack, of the West Middlesex Water Works, Hammersmith, and Alfred Edwin Carter, of the West Middlesex Water Works, Kensington, both in the county of Middlesex, for the invention of "Improvements in screw cocks."

On both their petitions, recorded in the Office of the Commissioners on the 6th day of March, 1862.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

14th March 1862.

2298. Timothy Morris, Robert Weare, and Edward Henry Cradock Monckton, all of 4, Trafalgar Square, (Patent Office), in the county of Middlesex, for an invention of "Improvements in batteries for obtaining electric currents, and the products therefrom." — Dated 14th September, 1861.

2300. Samuel Horsley and Edward Hobson Jones, both of Liverpool, in the county of Lancaster, Engineers, for an invention of "Improvements in apparatus for cleaning and polishing boots, shoes, and other coverings for the feet, partly applicable for cleaning plate and other articles of domestic use."—Dated 16th September, 1861.

2302. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "Improved apparatus for drying grain."—Communicated to him from abroad by Casimir Druart, of No. 15, Passage des Petites Ecuries, Paris, France.—Dated 16th September, 1861.

2312. Frederic Maitland Ransome and Ernest Leslie Ransome, both of Ipswich, in the county of Suffolk, for an invention of "Improvements in treating stone, bricks, and other surfaces, and in the manufacture of filters."—Dated 16th September, 1861.

2315. Francis Wrigley, of the city of Manchester, in the county of Lancaster, Consulting Engineer, for an invention of "Improvements in the construction, manufacture, and mode of securing armour for the protection of ships and fortifications against projectiles."—Dated 17 September, 1861.

2316. Frederic Barnett, Inventor, residing No. 60, St. Mary Axe, in the city of London, for an invention of "An improvement in the light given by street and other lamps by means of reflectors in white earthenware, china, and all enamel materials, in conjunction with an improved chimney to draw up the exhalations and smoke of all lighting materials."—Dated 17th September, 1861.

2319. George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improvements in machinery or apparatus for the manufacture of horse-shoe and other nails."—Communicated to him from abroad by Charles Alexandre Louvrier, of Paris, Machinist.—Dated 17th September, 1861.

2320. Joseph Statham, of Salford, in the county of Lancaster, Blacksmith, and William Statham, of Openshaw, in the county of Lancaster, Engineer, for an invention of "Certain improvements in machinery or apparatus for mowing and reaping."—Dated 17th September, 1861.

2321. Joseph Lee and Benjamin Dutton Taplin, of the Patent Crank Works, Lincoln, for an invention of "Improvements in traction engines." —Dated 17th September, 1861.

2323. George White, of 7A, Pancras Lane, in the city of London, for an invention of "Improvements in apparatus for filtering or purifying water or other liquids."—A communication to him from abroad by Mr. Jean Antoine Victor Burg, Doctor of Medecine, of Paris.—Dated 18th September, 1861.

2328. Edward Partington, of Heap Bridge, in the county of Lancaster, Manager, for an invention of "Certain improvements in machinery or apparatus employed in the manufacture of paper." —Dated 18th September, 1861.

2331. Edmund Suckow and Edward Habel, of the city of Manchester, in the county of Lancaster, Engineers, for an invention of "Improvements in machinery or apparatus for opening and cleaning cotton and other fibrous materials."—Dated 18th September 1861.

2333. Louis Gabriel Auguste Condroy, of the town of Douai, in the empire of France, Machine Builder, for an invention of "An improved centrifugal apparatus intended for purifying, washing, drying, moulding, or extracting from liquids substances or materials of various kinds which are deposited or poured for this purpose in moveable baskets or boxes fitted in the said apparatus."—Dated 19th September 1861.

2341. William Thomas Tongue, of Liverpool, in the county of Lancaster, Wholesale Ironmonger, and John Greer, of the same place, Tin-plate Worker, for an invention of "An improved portable self-acting water-engine for extinguishing fires and other purposes."—Dated 19th September 1861.

2342. John Hays Wilson, of the firm of John Hays Wilson and Company, of Liverpool, in the county of Lancaster, Brass Founders and Ships' Ironmongers, for an invention of "Improvements in pumps, chiefly applicable to ships' lift pumps." —Dated 19th September, 1861.

2380. Angelo James Sedley, of 210 Regent Street, in the county of Middlesex, for an invention of "Improvements in constructing bridges and viaducts."—Dated 24th September, 1861.

2390. Thomas Bright, of Rochdale, in the county of Lancaster, Carpet Manufacturer, and Robert Mills, of the same place, Engineer, for an invention of "Improvements in apparatus or means employed in the printing of yarns for carpets and other fabrics."—Dated 25th September, 1861.

2589. Thomas Edward Merritt, of Rochester, in the county of Kent, Drawing Master, for an invention of "Improvements in apparatus for obtaining motive power." — Dated 17th October, 1861.

2740. Elizabeth Anne Maling, of No. 25, Whitehead's Grove, Chelsea, in the county of Middlesex, Spinster, for an invention of "Improvements in glass cases for the cultivation of plants and flowers."—Dated 1st November, 1861.

15. James Howard, Agricultural Engineer, and Edward Tenney Bousfield, Engineer, both of Bedford, for an invention of "Improved apparatus applicable to steam cultivation." — Dated 1st January, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 12th March*, 1862, *inclusive.*)

10th March.

653. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the apparatus of electric lamps or lights."—A communication from abroad by Victor Louis Marie Serrin, Civil Engineer, of Paris.—Dated 15th March, 1859.

11th March.

631. John Cunliffe and Frederick Piggott both of the city of Manchester, Manufacturers, and George Mallinson, of Salford, in the county of Lancaster, Pattern Designer, for an invention of "Improvements in the manufacture of ornamental woven fabrics."—Dated 12th March, 1859.

12th March.

641. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Editor of the Mechanics' Magazine, and Patent Agent, for an invention of "An improved method of treating wood and other fibres in order to form threads."—A communication from Messrs. Tavernier and Vouillon, residing in Paris.—Dated 14th March, 1859.

761. George Hazeltine, Gentleman, of Washington, in the district of Columbia, United States of America, now of 37, King Street, in the city of London, for an invention of "Improvements in the manufacture of small metallic chains."—A communication from Edwin H. Perry, of Rhode Island, United States.—Dated 26th March, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 12th March*, 1862, *inclusive.*)

11th March.

555. James Murdoch Napier, of the York Road, Lambeth, in the county of Surrey, for an invention of "Improvements in the furnaces used in the manufacture of soda or alkali."—Dated 12th March 1855.

12th March.

574. Edmund Johnson Mitchell, of Bradford, in the county of York, Stuff Merchant, for an invention of "An improvement in rollers employed in the washing of wool and linen, in the squeezing of sized cotton warps, and other like purposes." — Dated 14th March, 1855.

Erratum in Journal of 4th March, 1862.

After 2398, for "2411" read "2418."

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234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March ,,
268	,, April to June ,,
291	,, July to September ,,
321	,, October to December ,,
345	A.D. 1854—January to March ,,
371	,, April to June ,,
399	,, July to September ,,
424	,, October to December ,,
451	A.D. 1855—January to March ,,
475	,, April to June ,,
505	,, July to September ,,
527	,, October to December ,,
553	A.D. 1856—January to March ,,
579	,, April to June ,,
605	,, July to September ,,
632	,, October to December ,,
660	A.D. 1857—January to March ,,
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737	,, October to December ,,
761	A.D. 1858—January to March ,,
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660	A.D. 1853—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1854—January to March ,,
789	,, April to June ,,
815	,, July to September ,,
842	,, October to December ,,

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B. Woodcroft.

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THE

COMMISSIONERS OF PATENTS' JOURNAL.

By Authority.

(*Registered for transmission abroad.*)

No. 856. TUESDAY, MARCH 18, 1862. Price 2d.

Applications for Letters Patent.

(*14th, 15th, and 17th March*, 1862.)

701. Alexandre Quinard, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, Hardware Manufacturer, for an invention of "A machine for manufacturing horse shoe nails."—Dated 14th March, 1862.

702. Robert Garthwaite, of Eldon Street, Durham Road, Darlington, for an invention of "An improved mode or design for providing extra, superior, or better accommodation in double tenement houses."—Dated 14th March, 1862.

703. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in trusses or bandages, and in pessaries to be used therewith when required."—A communication to him from abroad by M. Louis Polydore Grandcollot, of Paris, in the empire of France.—Dated 14th March, 1862.

704. George Bennet, of No. 21, Manchester Buildings, Westminster, in the county of Middlesex, for an invention of "An improvement in the coating and covering of wrought iron for the purpose of preserving it and preventing oxidation."—Dated 14th March, 1862.

705. George Henry Sanborn, of Boston, state of Massachusetts, United States of America, for an invention of "Improvements in gas regulators."—A communication from Jeremiah Henry Norton, a person resident at Boston, Massachusetts, United States of America.—Dated 14th March, 1862.

706. Ludwig Gabler, of No. 41, Bernard Street, and Maximilian Zingler, of No. 14, Granville Street, both in the county of Middlesex, for an invention of "Improvements in manufacturing articles from ivory and bone."—Dated 14th March, 1862.

707. George Tomlinson Bousfield, of Loughborough Park, in the county of Surrey, for an invention of "Improvements in machinery for digging and disintegrating the earth for agricultural purposes."—A communication to him from abroad by Elias Howe, junior, a person resident at Brooklyn, state of New York, United States of America.—Dated 14th March, 1862.

708. Alexander John Paterson, of the city of Edinburgh, Gentleman, for an invention of "Improvements in the construction of electric telegraph cables."—Dated 14th March, 1862.

709. Matthew Andrew Muir, of Glasgow, in the county of Lanark, North Britain, Machinist, and James McIlwham, of the same place, Machinist, for an invention of "Improvements in railway sleepers and chairs and in the mode of fixing rails."—Dated 14th March, 1862.

710. William Turner, of The Steam Bakery, No. 39, Hockley, in the town and county of the town of Nottingham, Baker and Flour Dealer, for an invention of "Improvements in the construction of bakers' ovens, and in the use of furnaces and other apparatus connected therewith, and in the means or appliances employed therein."—Dated 14th March, 1862.

711. Alfred Coles and William Coles, both of Wych Street, Strand, in the county of Middlesex, Truss Makers, for an invention of "Improvements in the construction of trusses for cases of hernia."—Dated 15th March, 1862.

712. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "An improved brake for railroad carriages."—A communication to him from abroad by Augustine Irel Ambler, Attorney-at-law, Roseline Nancy Ambler, wife of said Augustine Irel Ambler, and Warrick Martin, Banker, all of the city and county of Milwaukee, in the state of Wisconsin, United States of America.—Dated 15th March, 1862.

713. Harry Emanuel, of Brook Street, Hanover Square, in the county of Middlesex, Court Jeweller, for an invention of "An improvement in the manufacture of ornaments for personal wear." —Dated 15th March, 1862.

714. Constantine Nicolaus Kottula, of Belle Isle, in the county of Middlesex, Soap Manufacturer, for an invention of "Improvements in the manufacture of combined soaps."—Dated 15th March, 1862.

715. George Brooks Pettit, of New Oxford Street, in the county of Middlesex, for an invention of "An improved method of, and apparatus for heating water and other liquids, applicable also to the evaporation of liquids."—Dated 15th March, 1862.

716. Julien Smadja, of 16, Stamford Street, London, in the county of Surrey, Merchant, for an invention of "Improvements in bustles and crinolines, and in materials used in their construction." —Dated 15th March, 1862.

717. William McAdam, of Glasgow, in the county of Lanark, North Britain, Pottery and Glass Manufacturer, for an invention of "Improvements in the manufacture of blocks, pulleys, and weights for window sashes and other purposes, and in the mode of applying the same."—Dated 15th March, 1862.

718. James Hunter, of Coltness Iron Works, Cambusnethan, Ironmaster, and Robert Scott, of the same place, Engineer, for an invention of "Improvements in reaping machines."—Dated 15th March, 1862.

719. John Grant, of Albion Place, Maidstone, in the county of Kent, Farmer, for an invention of "Improvements in the construction of portable railways, and in the trucks or carriages to be used thereon."—Dated 15th March, 1862.

720. Henry Young Darracott Scott, of Brompton Barracks, near Chatham, in the county of Kent, Captain in the Royal Engineers, for an invention of "Improvements in the manufacture of cement."—Dated 15th March, 1862.

721. Sublime Napoléon De la Haye de Barbezières, of Paris, in the empire of France, Barrister in the Imperial Court of Paris, for an invention of "An improved construction of horse shoe."—Dated 15th March, 1862.

722. John Avery, of 26, Mark Lane, in the city of London, for an invention of "Improvements in purifying coal."—A communication to him from abroad by John Reed, a person resident at New York, United States of America.—Dated 15th March, 1862.

723. George Hamilton, of No. 6, Willow Terrace, Islington, in the county of Middlesex, for an invention of "Improvements in tumbler locks."—Dated 15th March, 1862.

724. James Robey, of No. 49, Hereford Road North, in the county of Middlesex, for an invention of "Improvements in manufacturing and refining sugar, and in apparatus employed therein."—Dated 15th March, 1862.

725. William Pickstone, of Radcliffe, in the county of Lancaster, for an invention of "Improvements in the manufacture of piled fabrics."—Dated 15th March, 1862.

726. John Tomlinson Pendlebury, Blacksmith, and Thomas Pendlebury, Mechanic, both of Bury, in the county of Lancaster, for an invention of "An improved form of lubricator."—Dated 15th March, 1862.

727. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in water meters."—A communication to him from abroad by Mr. Frank Grant Johnson, of Brooklyn, King's County, state of New York, United States of America, Doctor of Medicine.—Dated 17th March, 1862.

728. Alexander Southwood Stocker and Alexander Richmond Stocker, both of Wolverhampton, in the county of Stafford, Manufacturers, for an invention of "Improvements in the manufacture and construction of articles to be worn by bipeds and quadrupeds."—Dated 17th March, 1862.

729. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "Improvements in the manufacture of crinolines."—A communication to him from abroad by Messieurs Libert and Co., of Boulogne-sur-Mer, in the empire of France.—Dated 17th March, 1862.

730. William Bury Lord, of Plymouth, in the county of Devon, Veterinary Surgeon, Royal Artillery, and Frederic Hughes Gilbart, of Brixton, in the county of Surrey, Gentleman, for an invention of "Improved means or apparatus for raising, lowering, and releasing ships' boats or other heavy bodies."—Dated 17th March, 1862.

731. Louis Pierre Mongruel, of 7, Rue Vivienne, Paris, in the empire of France, for an invention of "An improved cold vapour generator, which may also be used in the carburation of illuminating gas."—Dated 17th March, 1862.

732. William Bowser, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in ships' fire hearths or boiling and cooking apparatus."—Dated 17th March, 1862.

733. George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improved apparatus for drawing."—A communication to him from abroad by Joséphin Soulary, of Paris, France.—Dated 17th March, 1862.

734. John Weems and William Weems, both of Johnstone, in the county of Renfrew, North Britain, Engineers, for an invention of "Improvements in apparatus for indicating the pressure or quantity, and in regulating the discharge of fluids."—Dated 17th March, 1862.

735. Brereton Todd, of Bissoe and Perran Smelting Works, near Falmouth, in the county of Cornwall, for an invention of "Improvements in the manufacture of antimony and the oxide of antimony."—Dated 17th March, 1862.

736. William Barford, of the firm of Amies and Barford, of Peterborough, in the county of

Northampton, Agricultural Implement Makers, for an invention of "Improvements in rollers for rolling land."—Dated 17th March, 1862.

737. William Barber, of Stockport, in the county of Chester, for an invention of "Improvements in the manufacture of hats."—Dated 17th March, 1862.

738. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in cranks for driving sewing machines and other machinery."—A communication to him from abroad by Turner Williams, a person resident at Providence, state of Rhode Island, of the United States of North America."—Dated 17th March, 1862.

739. John Minton Courtauld, of Braintree, in the county of Essex, Manufacturer, for an invention of "Improvements in power looms."—Dated 17th March, 1862.

740. James Hicks, of Hatton Garden, in the county of Middlesex, Meteorological Instrument Maker, for an invention of "Improvements in mercurial barometers."—Dated 17th March, 1862.

741. Ephraim Smith, of Carlisle Street, Soho, in the county of Middlesex, Jeweller, for an invention of "An improvement in watch keys."—Dated 17th March, 1862.

742. William Gossage, of Widnes, in the county of Lancaster, Chemist, for an invention of "Improvements in the manufacture of soda and potash."—Dated 17th March, 1862.

743. Thomas Waller, of Conduit Street West, in the county of Middlesex, Gentleman, for an invention of "Improvements in breech loading firearms."—A communication to him from abroad by Christopher Tyler, Stephen Wood, Egerton Marcy, and John Wilkinson, all of New York in the United States of America.—Dated 17th March, 1862.

744. Thomas Myers, of Brighton, in the county of Sussex, Gentleman, for an invention of "Improvements in meters for measuring water, gas, or other fluids."—Dated 17th March 1862.

Notices to Proceed.

Notice is hereby given, that

2780. John Beresford Love, of Philadelphia, in the state of Pennsylvania, in the United States of America, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in the mode of combining together and securing to the sides of navigable vessels and water-batteries armour plates of iron or steel."

2781. And John Peter Bourquin, of Newman Street, Oxford Street, in the county of Middlesex, Manufacturer of Photographic Goods, has given the like notice in respect of the invention of "Improvements in ornamenting the covers of photographic albums, books, writing-cases, and other like articles."

2783. And Henry Orth, of Wissembourg, in the empire of France, Merchant, has given the like notice in respect of the invention of "An improved soap."

As set forth in their respective petitions, all recorded in the said office on the 5th day of November, 1861.

2787. And Alexander Prince, of the Office for Patents, 4, Trafalgar Square, Charing Cross, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in furnaces for reducing zinc ores."—A communication to him from abroad by Adolphe Charlier, Director-General of the Mines and Foundries of Eschweiler, resident at Stolberg, near Aix-la Chapelle, in the kingdom of Prussia.

As set forth in his petition, recorded in the said office on the 6th day of November, 1861.

2792. And John Walmsley, of New Accrington, in the county of Lancaster, has given the like notice in respect of the invention of "Improvements in looms for weaving."

2794. And Alexander William Williamson, of University College, Gower Street, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in the construction of steam boilers."

2798. And Henry Gould Gibson, of Mark Lane, in the city of London, Merchant, has given the like notice in respect of the invention of "Improvements in apparatuses for drying hops, malt, grain, and other vegetable substances, part of which is applicable as a fan or blower."—A communication to him from abroad by Joseph Perrigault, of Rennes, France.

As set forth in their respective petitions, all recorded in the saidoffice on the 7th day of November, 1861.

2806. And Joseph Tyler, of 62, Pratt Street, Camden Town, in the county of Middlesex, Professor of Music, has given the like notice in respect of the invention of "Improvements in the manufacture of clarionets."

2808. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in the treatment of carpets."—A communication to him from abroad by Jean Armand Edmond Polonceau, of Paris, in the empire of France.

2809. And John Byrne, of Whitehouse, in the county of Antrim, Flax Dresser, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for scutching and refining flax, hemp, jute, and other fibrous substances."

As set forth in their respective petitions, all recorded in the said office on the 8th day of November, 1861.

2811. And David Cowan, of Hungerford Street, Strand, in the county of Middlesex, Manufacturer, has given the like notice in respect of the invention of "Improvements in the construction of pneumatic subaqueous tubes for passenger or goods traffic, and in machinery for the manufacture thereof."

2815. And François Henry Marie Côme Damiens Chevalier Fenis-de Lacombe, of Paris,

France, Gentléman, has given the like notiee in respect of the invention of "Improvements in gencrating hydrogen gas for illuminating or other purposes, and in apparatus used therein."

2816. And Sam Hague, of Westwinsted, Litchfield county, in the state of Connecticut, Americe, but having a temporary residenee in the town and county of the town of Nottingham, Cutler, has given the like notiee in respect of the invention of "Improvements in the manufacture of hoes, adzes, or other similar articles."

2819. And John Fisher, of Carrington, near Nottingham, Lace Manufaeturer, has given the like notiee in respect of the invention of "Improvements in apparatus for indieating or regulating the passing of railway trains."

2824. And William Clark, of 53, Chaneery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notiee in respect of the invention of "Improvements in portable and other filters."—A communication to him from abroad by Jules Paeôme, Alfred Havard, and Jean Baptiste Bourgoise, of 29, Boulevart St. Martin, Paris, Mechanieians.

2825. And Francis O'Reilly, of Shaw Street, in the city of Dublin, Ireland, has given the like notiee in respeet of the invention of "A new or improved table or apparatus for tailors to work at without sitting."

As set forth in their respective petitions, all recorded in the said office on the 9th day of November, 1861.

2830. And James John Shedlock, of Weirdale Villas, Earl's Court, Kensington, in the county of Middlesex, has given the like notiee in respeet of the invention of "Improvements in gas meters."

As set forth in his petition, recorded in the said office on the 11th day of November, 1861.

2835. And Robert Bellis, of the city of Chester, Builder, has given the like notice in respeet of the invention of "An improved method of laying wood floors."

2836. And John Davidson, of Leek, in the county of Stafford, Silk Manufaeturer, has given the like notiee in respect of the invention of "Improvements in apparatus for eommunicating between the passengers and the guard and engine driver of a railway train."

2844. And Louis Francois Duval and Louis André Beaudet, at Paris, 33, Bard St. Martin, town in the Freneh empire, have given the like notiee in respeet of the invention of "A new process of tanning."

2845. And Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notiee in respeet of the invention of "An improvement in and eomposition for treating iron and steel and articles manufaetured thereof."—A eommunieation to him from abroad by Alphonse Muller de la Mothe, of 33, Boulevart Saint Martin, Paris, France.

As set forth in their respective petitions, all recorded the said office on the 12th day of November, 1861.

2847. And Thomas Butterworth Collingwood, Manager, and Abraham Butterworth, Overlooker, both of Rochdale, in the county of Lancaster, have given the like notiee in respeet of the invention of "Improvements in throstle and doubling frames for spinning and doubling fibrous materials."

2851. And Edward Curtis Kemp, of Avon Place, Pershore Road, Birmingham, in the county of Warwiek, Agent, has given the like notiee in respeet of the invention of "Improvements in gas lamps, glasses, and other fittings."

2853. And Louis Rolland, of No. 306, Quai Jemmapes, Paris, in the empire of Franee, Merehant, has given the like notice in respeet of the invention of "An improved spring door shutter with a moveable lever."

2856. And Joseph Vaughan, of Birmingham, in the county of Warwick, Manufaeturer, has given the like notiee in respeet of the invention of "An improvement or improvements in the manufaeture of bayonets, and in apparatus or machinery to be employed therein."

2859. And Frederick Coney, of Waterloo Road, in the county of Surrey, Brush Maker, has given the like notiee in respect of the invention of "An improved stoek for brooms."

2862. And Alfred Edwin Carter, of the West Middlesex Water Works, Kensington, and Thomas Hack, of the West Middlesex Water Works, Hammersmith, both in the county of Middlesex, have given the like notiee in respect of the invention of "Improvements in serew cocks."

2865. And Henry Robinson Fricker, of No. 106, Leman Street, Whitechapel, Arehiteet and Surveyor, and John Manley, of Fairmantle Street, Truro, in the county of Cornwall, Civil Engineer and Mining Agent, have given the like notiee in respeet of the invention of "Improvements in apparatus for faeilitating the eleansing of sewers and other water courses or ways."

As set forth in their respective petitions, all recorded in the said office on the 13th day of November, 1862.

2875. And John Nixon, of Cardiff, county of Glamorganshire, has given the like notice in respect of the invention of "Improvements in apparatus for ventilating eoal or other mines, or o her underground exeavations."

2876. And James Spratt, of Camden Road Villas, Camden Town, in the county of Middlesex, Gentleman, has given the like notiee in respect of the invention of "Improvements in the preparation of food for hogs, dogs, eats, and poultry, and in apparatus for the same."

As set forth in their respective petitions, both recorded in the said office on the 15th day of November, 1861.

2883. And Jonathan Charles Goodall, of 12, Great College Street, Camden Town, and John Beale, of East Greenwieh, have given the like notice in respect of the invention of "Improvements in machinery for folding envelopes."

2885. And Eugène Estanque, of the eity of Mont de Marsan, department of the Landes, in the empire of Franee, Surgeon-Dentist, has given the like notiee in respeet of the invention of "An improved instrument for drawing teeth."

As set forth in their respective petitions, both recorded in the said office on the 16th day of November, 1861.

2899. And Anthony John Mundella, of the town and county of the town of Nottingham, Manufacturer, and William Onion, of the same place, Mechanic, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for the manufacture of looped fabrics."

As set forth in their petition, recorded in the said office on the 18th day of November, 1861.

2909. And Joseph Schloss, of Cannon Street West, in the city of London, Manufacturer, has given the like notice in respect of the invention of "Improvements in pouches."

As set forth in his petition, recorded in the said office on the 19th day of November, 1861.

2914. And Frederick Johnson, of 12, North Street, in the city of Westminster, Civil Engineer, has given the like notice in respect of the invention of "Improvements in ground or earth screws."

As set forth in his petition, recorded in the said office on the 20th day of November, 1861.

2940. And Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improved means of rendering steam-tight the opening for the passage of the piston-rod through the cylinder cover in steam engines, which means are applicable also to other parts of steam engines and parts of other engines, machines, and apparatus for the rendering thereof steam-tight and fluid-tight."—A communication to him from abroad by Francisque Million, of 33, Boulevart Saint Martin, Paris, France.

As set forth in his petition, recorded in the said office on the 22nd day of November, 1861.

2980. And Francis Alton Calvert, of the city of Manchester, Engineer, has given the like notice in respect of the invention of "Improvements in machinery and apparatus for burring, carding, and combing wool and other fibrous substances."

As set forth in his petition, recorded in the said office on the 27th day of November, 1861.

3001. And Samuel Alfred Carpenter, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "An improvement or improvements in attaching name plates or labels to umbrellas, parasols, walking-sticks, and whips."

As set forth in his petition, recorded in the said office on the 28th day of November, 1861.

3019. And John Cooper, of St. Margaret's Iron Works, Ipswich, in the county of Suffolk, and Charles Garrood, of Penge, in the county of Surrey, have given the like notice in respect of the invention of "Improvements in cultivators' horse-hoes and horse-rakes"

As set forth in their petition, recorded in the said office on the 30th day of November, 1861.

3083. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in treating atmospheric air and other elastic fluids, for motive power purposes, and in engines and apparatuses to be employed therein."—A communication to him from abroad by Charles Dickson Archibald, of New York, United States of America.

As set forth in his petition, recorded in the said office on the 9th day of December, 1861.

3222. And Thomas Edward Vickers, of Sheffield in the county of York, Steel Manufacturer, has given the like notice in respect of the invention of "Improvements in the wheels of railway engines and carriages, and in the machinery or apparatus to be used in making the same."

As set forth in his petition, recorded in the said office on the 24th day of December, 1861.

57. And William Bradshaw the younger, of Coventry, in the county of Warwick, Watch Maker, has given the like notice in respect of the invention of "Improvements in watches."

As set forth in his petition, recorded in the said office on the 8th day of January, 1862.

196. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in the prevention or removal of incrustation in or from steam generators, and in the apparatus employed therein."—A communication to him from abroad by Stanislas Michel Lecacheux and Bernard Sartre, both of Marseilles, in the empire of France.

As set forth in his petition, recorded in thesaid office on the 25th day of January, 1862.

206. And Samuel Alfred Carpenter, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "An improvement or improvements in covering and combining strips or bands of steel for crinoline or crinoline skirts."

As set forth in his petition, recorded in the said office on the 27th day of January, 1862.

251. And Alexandre César Barnabé Malois, Boot Maker, at Paris, in the empire of France, of 29, Boulevart St. Martin, has given the like notice in respect of the invention of "Improvements in the manufacture of boot and shoe heels, and in machinery to be used therein."

As set forth in his petition, recorded in the said office on the 30th day of January, 1862.

302. And Edward Fisher Smith, of Dudley, in the county of Worcester, Agent, and Thomas Swinnerton, of Dudley aforesaid, Blast Furnace Manager, have given the like notice in respect of the invention of "Improvements in the manufacture of coke, and in kilns or ovens for the manufacture of coke."

As set forth in their petition, recorded in the said office on the 5th day of February, 1862.

357. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improve-

ments in smoothing irons."—A communication to him from abroad by Charles Jean Baptiste Eugène Cailloué, of Paris, in the empire of France.
As set forth in his petition, recorded in the said office on the 11th day of February, 1862.

381. And Alfred Charles Ebbutt, Upholsterer, of 25, Blackman Street, borough of Southwark, and 20, 33, and 34, High Street, Croydon, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in reclining, easy, and other chairs."
As set forth in his petition, recorded in the said office on the 13th day of February, 1862.

404. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in electro-magnetic time keepers."—A communication to him from abroad by John Henry Koosen, of Dresden, in the kingdom of Saxony.

405. And William Avery, of the firm of James and Sons, of Birmingham, in the county of Warwick, Screw Manufacturers, has given the like notice in respect of the invention of "Improvements in machinery for the manufacture of screws, a part or parts of which improvements may also be used in the manufacture of pins, rivets, and nails."

413. And John Chatterton, of Highbury, in the county of Middlesex, Engineer, and Willoughby Smith, of Dalston, in the same county, Electrician, have given the like notice in respect of the invention of "Improvements in telegraph cables."
As set forth in their respective petitions, all recorded in the said office on the 15th day of February, 1862.

440. And William Bridges Adams, of Holly Mount, Hampstead, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in springs, and their arrangement for moving and stationary purposes."

445. And James Paterson, of the Middle Temple, in the county of Middlesex, Barrister-at-Law, has given the like notice in respect of the invention of "Improvements in means or apparatus for re-burning animal charcoal."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada East.

448. And James Wilcox, of Ludgate Hill, in the city of London, Sewing Machine Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of frills or ruffles, and in the machinery or apparatus employed therein."—A communication to him from abroad by Chauncey Orrin Crosbey, of New Haven, Connecticut, United States of America.
As set forth in their respective petitions, all recorded in the said office on the 19th day of February, 1862.

455. And James Paterson of the Middle Temple, in the county of Middlesex, Barrister-at-Law, has given the like notice in respect of the invention of "Improvements in the use of animal charcoal."—A communication to him from abroad by George Alexander Drummond, a person resident at Montreal, Canada, East.
As set forth in his petition, recorded in the said office in the 20th day of February, 1862.

528. And Edwin George Bruzaud, of Pembroke Road, Kensington, in the employ of Messrs. Erard and Company, of 18, Great Marlborough Street, Harp and Piano Forte Manufacturers, has given the like notice in respect of the invention of "Improvements in piano fortes."
As set forth in his petition, recorded in the said office on the 26th day of February, 1862.

543. And Joseph Revell, of Dukinfield, in the county of Chester, Master Plasterer and Decorator, has given the like notice in respect of the invention of "Improvements in oil cans."
As set forth in his petition, recorded in the said office on the 27th day of February, 1862.

552. And James Parker, of No. 6, Lilford Road, Camberwell, Surrey, Solicitor's Managing Clerk, has given the like notice in respect of the invention of "An improved mode of applying steam as a motive power for propelling vessels and for other purposes."
As set forth in his petition, recorded in the said office on the 28th day of February, 1862.

567. And Joseph Bradlee Kendall, of Boston, in the state of Massachusetts, United States of America, has given the like notice in respect of the invention of "An improved horse shoe."
As set forth in his petition, recorded in the said office on the 1st day of March. 1862.

587. And Bridge Standen, of Salford, near Manchester, in the county of Lancaster, Chymist, has given the like notice in respect of the invention of "Improvements in the preparation or manufacture of portable manure or fertilising compound, and in the collection or extraction therefrom of a certain liquid applicable to various purposes, and also in machinery or apparatus to be employed therein.'

590. And William Tongue, of Bradford, in the county of York, Engineer, has given the like notice in respect of the invention of "Improvements in machinery for breaking, rubbing, and scutching flax, hemp, or other vegetable fibrous materials, and in processes for treating silk waste."
As set forth in their respective petitions, all recorded in the said office on the 4th day of March, 1862.

596. And William Tongue, of Bradford, in the county of York, Engineer, has given the like notice in respect of the invention of "Improvements in machinery for preparing silk, flax, hemp, or other fibrous materials."
As set forth in his petition, recorded in the said office on the 5th day of March, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

18th March, 1862.

2339. Edgar Breffit, of King William Street, in the city of London, for an invention of "An improved fuel."—Dated 19th September, 1861.

2347, René Prudent Patrice Dagron, of Paris, in the French Empire, Photographer, for an invention of "An improved microscope to be used for exhibiting photographic views and productions."—Dated 19th September, 1861.

2351. John Oliver, of Colchester, in the county of Essex, Manufacturing Chemist, John Grantham, of No. 31, Nicholas Lane, in the city of London, Engineer, William Sinnock, of Sylvan Cottage, Woodford, in the county of Essex, Ropery Engineer, and Montague Richard Leverson, of No. 12, Saint Helen's Place, in the city of London, Solicitor and Patent Agent, for an invention of "Improvements in the mode of obtaining certain chemical substances and in the treatment of vegetable fibre, and in obtaining manurial and other products therefrom."—Dated 20th September, 1861.

2353. Joseph Christian Davidson, of Yalding, in the county of Kent, Farmer, for an invention of "Improvements in thrashing machines."—Dated 20th September, 1861.

2355. James Burnand, of No. 31, Netherthorpe Street, Sheffield, in the county of York, Table Knife Manufacturer, for an invention of "Improvements in the means of fastening or securing the handles of table knives and forks, daggers, and other similar articles."—Dated 28th September, 1861.

2359. Francis William Wymer, Engineer, of 7, St. Ann's Row, Newcastle-on-Tyne, for an invention of "Improvements in apparatus used in sounding the holds of ships or vessels."—Dated 20th September, 1861.

2362. Charles Board, of the city of Bristol, Cabinet Maker, for an invention of "Improvements in veneering presses."—Dated 21st September, 1861.

2363. Henry Cockey and Francis Christopher Cockey, of the Frome Iron Foundry, in the county of Somerset, Engineers, for an invention of "Improvements in apparatus employed in the manufacture of gas."—Dated 21st September, 1861.

2365. William Stableford, of Oldbury, in the county of Worcester, Engineer, for an invention of "Improvements in the manufacture of wheels, and in securing tyres on or to wheels."—Dated 21st September, 1861.

2368. Spendlove Desborough, of Noble Street, St. Martin's le Grand, in the city of London, Manufacturer, for an invention of "Improvements in the manufacture of pins for hair, dress, jewellery, and other purposes."—Dated 21st September, 1861.

2369. James Henry Duley, of Northampton, in the county of Northamptonshire, Iron Founder, for an invention of "An improvement in the manufacture of axle-boxes and bushes."—Dated 23rd September, 1861.

2373. Henry Brinsmead, of Ipswich, in the county of Suffolk, Machinist, for an invention of "Improvements in apparatus for raising and stacking straw and other agricultural produce."—Dated 23rd September, 1861.

2376. James Price, of Dundalk, Ireland, Civil Engineer, for an invention of "Improvements in the permanent way of railways."—Dated 23rd September, 1861.

2377. Joseph Jacob, of Brünn, in the empire of Austria, but at present residing in Golden Square, (W.) London, in the county of Middlesex, for an invention of "Improvements in the mode of and apparatus for obtaining and treating hydrogen gas, and the application thereof to various purposes, parts of which improvements are applicable to the manufacture of iron and steel."—A communication to him from abroad by Carl Preisenhammer, and Carl Weniger, both of Zöptau, in the empire of Austria.—Dated 23rd September, 1861.

2381. George Joseph Gladstone, of Blackwall, Shipwrights' Surveyor, for an invention of "Improvements in apparatus for disengaging boats."—Dated 24th September, 1861.

2391. Henry Purnell, of Glasgow, in the county of Lanark, North Britain, Engineer and Manufacturer of Warming and Ventilating Apparatus, for an invention of "Improvements in constructing and arranging warming apparatus."—Dated 25th September, 1861.

2416. James Kimberley, of Birmingham, in the county of Warwick, Wholesale Ironmonger and Manufacturer, for an invention of "A new or improved machine for morticing, tenoning, sawing, boring, drilling, and grooving wood."—Dated 27th September, 1861.

2422. John Adams Knight, of No. 4, Symonds Inn, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "An improvement in steam pumping engines."—A communication to him from abroad by Wellington Lee, of No. 197, East 19th Street, New York, United States of America.—Dated 28th September, 1861.

2440. Frederick Walton and Richard Beard, junior, both of the British Grove Works, Chiswick, in the county of Middlesex, for an invention of "Improvements in the manufacture of varnishes applicable to the waterproofing and coating of fabrics and other uses."—Dated 30th September, 1861.

2486. Joseph Tweedale, of Milkstone, Rochdale, in the county of Lancaster, Machinist, for an invention of "Improvements in machinery for preparing and spinning cotton and other fibrous substances."—Dated 4th October, 1861.

2548. Samuel Ratcliffe Carrington, of Stockport, in the county of Chester, Hat Manufacturer, for an invention of "Improvements in hats and caps."—Dated 12th October, 1861.

2632. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow,

North Britain, Gentleman, for an invention of "Improvements in apparatus for facilitating the passage of trains up steep gradients on railways."—A communication to him from abroad by Thomas Agudio, of Turin, in the kingdom of Italy, Engineer.—Dated 21st October, 1861.

2802. Thomas Churchman Darby, Farmer, Little Waltham, in the county of Essex, for an invention of "Improvements in the construction of horse hoes."—Dated 8th November, 1861.

3201. Thomas Green, of Smithfield Iron Works, Leeds, in the county of York, Willoughby Green, of 11, Brunswick Place, Leeds, and Robert Mathers, of Trafalgar Street, Leeds, for an invention of "Improvements in lawn mowing, rolling, and collecting machines."—Dated 20th December, 1861.

298. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of iron and steel."—The said invention has been communicated to him from abroad by John Gardner and Henry Richard Gardner, both of the city and state of New York, in the United States of America.—Dated 4th February, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 14th March*, 1862, *inclusive.*)

13th March.

706. William Colborne Cambridge, of Bristol, Agricultural Implement Maker, for an invention of "An improved construction of chain harrow."—Dated 19th March, 1859.

14th March.

640. Richard Waller, of 50, Baker Street, Portman Square, in the county of Middlesex, Gentleman, for an invention of "Improvements in joining leather, flexible and textile materials, for the production of boots and shoes and articles of the like description, and harness, strapping, bags, sails, tent covers, portmanteaus, and such other articles, together with machinery and apparatus for that purpose."—Dated 14th March, 1859.

649. Walter Langton, of 14, Wharf, Belvidere Road, Lambeth, in the county of Surrey, for an invention of "Improvements in the manufacture of keys and wood fastenings used in constructing railways."—Dated 15th March, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 15th March*, 1862, *inclusive.*

13th March.

571. Jonas Marland, of Sun Vale Iron Works, Walsden, in the county of Lancaster, for an invention of "An improvement or improvements in the manufacture of rollers for drawing, spinning, doubling, and preparing cotton-wool, flax, and other fibrous materials, a part or the whole of which improvement or improvements are applicable to shaping metals for other purposes."—Dated 14th March, 1855.

14th March.

647. James Willis, of No. 75, Cheapside, in the city of London, for an invention of "Improvements in certain parts of the frames and furniture of umbrellas and parasols."—Dated 24th March, 1855.

741. Peter Rothwell Jackson, of Salford, in the county of Lancaster, Engineer, for an invention of "Improvements in machinery for making patters and for moulding therefrom."—Dated 3rd April, 1855.

801. Samuel Holt, of Shaw Heath, Stockport, in the county of Chester, Manager, for an invention of "Improvements in weaving plush or piled fabrics."—Dated 11th April, 1855.

15th March.

845. Edward Ellis Allen, of 376, Strand, in the county of Middlesex, Engineer, for an invention of "Improvements in steam-engines."—Dated 17th April, 1855.

Erratum in Journal of 14th March, 1862.

527. For "Ravant" read "Ravaut."

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

FOREIGN PATENTS.

BELGIUM.*

List of Patents of Invention Delivered on the 15th March, 1862.†

(*Communicated by the Belgian Government.*)

(For previous List, see No. 853 of this Journal.)

12,193. L. De Curte, of Brussels, a Patent of Improvement for "A mode of inereasing the produce of eonerete fat aeids from fat substances treated by aeidification and distillatiou in the manufaeture of candles."—Dated 21st February, 1862.—(Brudenne's Original Patent, 13th March, 1861.)

12,194. C. R. Meyn, represented by A. Calvet, of Brussels, for "Improvements in the manufacture of burners used in gas-heating."—Dated 21st February, 1862.

12,195. J. Blondel, represented by A. Calvet, of Brussels, for an imported invention of "A moveable stove for cooking food."—Dated 21st February, 1862. — (French Patent, 26th August, 1861.)

12,196. Ad. De Hansey, of Liége, for "A reverberatory furnace for puddling and reheating metals, and for heating steam boilers."—Dated 22nd February, 1862.

12,197. P. Decrauw, of Brussels, for "Tissues imitating silk velvet." — Dated 22nd February, 1862.

12,198. D. Marchal, of Brussels, for "Means and proeesses for removing the destruetive vibrations produced by the passage of carriages on railways and eommon roads." — Dated 22nd February, 1862.

12,199. J. C. Toussaint, represented by F. Authoine, of Brussels, for an imported invention of "A preserving metal cigar ease."—Dated 22nd February, 1862.—(French Patent, 15th January, 1862.)

12,200. J. Lemoine, represented by F. Bilaut, of Brussels, for an imported invention of "Cartridges."—Dated 24th February, 1862.—(French Patent, 12th February, 1862.)

12,201. F. T. Wahl and F. Pradel, represented by A. Calvet, of Brussels, for an imported invention of "Improvements in Giffard's feeder."—Dated 24th February, 1862.---(French Patent, 23rd February, 1861.)

12,202. E. Lepainteur, represented by A. Calvet, of Brussels, for an imported invention of "A process for extracting the oleie aeid eontained in the seeds of wool and other textile substances."—Dated 24th February, 1862.—(Freneh Patent, 5th Deeember, 1861.)

12,203. J. Krasuski, represented by A. Calvet, of Brussels, for an imported invention of "Au apparatus for stopping fiery horses."—Dated 24th February, 1862. — (Freneh Patent, 5th February, 1862.)

12,204. A. C. E. M. C. Goussard, represented by A. Calvet, of Brussels, for an imported invention of "Apparatus and proecsses for simultaneously filtering and disinfecting fecal matters and urine for the manufaeture of manure."—Dated 24th February, 1862.—(English Patent, 13th February, 1862.)

12,205. P. Bourdin, represented by A. Calvet, of Brussels, for an imported invention of "A thrashing maehine."—Dated 24th February, 1862. —(French Patent, 17th July, 1861.)

12,206. G. Lowry, represented by H. Biebuyek, of Brussels, for an imported inveution of "Improvements in maehines for earding and eombing textile substances." — Dated 24th February, 1862.—(French Patent, 20th February, 1862.)

12,207. L. P. Grandcollot, represented by H. Biebuyek, of Brussels, for an imported invention of "A hypogastrie belt with or without a jointed pessary."—Dated 24th February, 1862.—(French Patent, 3rd January, 1859.)

12,208. C. W. Siemens, represented by H. Biebuyek, of Brussels, a Patent of Improvement for "A system of industrial furnaees."—Dated 24th February, 1862.—(Original Patent, 20th March, 1861.)

12,209. C. Morfit, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in the manufacture of soap."—Dated 24th February, 1862.—English Patent, 15th November, 1861.)

12,210. J. B. A. Quinquandon, represented by A. Crooy, of Brussels, for an imported invention of "A substitute for eards of Jaequart looms, or so-called 'Quinquandon's eomposing stiek.'"—Dated 24th February, 1862.—(French Patent, 18th February, 1862.)

12,111. Cordier and Co., represented by A. Crooy, or Brussels, for an imported inveution of "Improvements in fire-arms."—Dated 24th February, 1862.—(Freneh Patent, 17th February, 1862.)

12,112. D. Edleston, represented by R. Culliford, of Brussels, for an imported invention of "Improvements in singeing fabrics."—Dated 24th February, 1862.—(English Patent, 25th January, 1862.)

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

12,213. D. Baudelot-Cochinaux, of Brussels, for an imported invention of "A so-called 'Pharogene lamp.'"—Dated 26th February, 1862.—(French Patent, 19th April, 1861.)

12,214. W. Clissold, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in machines for greasing wool."—Dated 26th February, 1862.—(English Patent, 26th August, 1861.)

11,215. W. L. Winand, represented H. Biebuyck, ofB russels, for an imported invention of "Improvements in mounting and working ship and other guns."—Dated 26th February, 1862.—(French Patent, 12th February, 1862.)

12,216. J. Pirotte, of Liége, for "A furnace with a revolving sole for reheating small pieces."—Dated 27th February, 1862.

12,217. H. Lavignac, of Liége, a Patent of Improvement for "An apparatus for boiling sugar."—Dated 25th February, 1862.—(Original Patent, 22nd November, 1861.)

12,218. O. Malherbe, of Liége, for "A revolver with safety charge covers, moveable rod, and cartridge with a linstock-tube."—Dated 28th February, 1862.

12,219. A. Hancart, of Boussu, for "A boiler for boiling syrup of beetroot-sugar."—Dated 27th February, 1862.

12,220. A. Chappius-Straudiot, of Soignies, for "A composition for preventing the incrustation of steam boilers."—Dated 27th February, 1862.

12,221. J. B. Fondu, of Lodelinsart-Charleroi, for "A tubular grate with a rotary movement applicable to all fire-places."—Dated 3rd March, 1862.

12,222. D. Clercx, of Gilly-Charleroi, for "Moveable grates of hollow and perforated cast iron, applicable to fire-places of steam boilers and others."—Dated 4th March, 1862.

12,223. C. Van Goethem and Co., of Molenbeek St. Jean, for "Improvements in the manufacture of sugar."—Dated 27th February, 1862.

12,224. J. Beaupied, represented by Van Goethem and Co., of Molenbeek St. Jean, a Patent of Improvement for 'Weitzel's apparatus for boiling and evaporating cane-juice."—Dated 27th February, 1862.—(Original Patent, 8th November, 1861.)

12,225. B. Nicaise, of Brussels, for "A process for tempering pieces of cast iron."—Dated 27th February, 1862.

12,226. D. Arémar, represented by Th. Devos, of Molenbeek St. Jean, for an imported invention of "Applying the endless screw to remontoirs, and to regulating watches by the pendant, applicable to all kinds of watches."—Dated 27th February, 1862.—(French Patent, 26th February, 1862.)

12,227. J. D. Jobin, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in locomotive engines, and in steam engines in general."—Dated 27th February, 1862.—(French Patent, 15th February, 1862.

12,228. H. De Moor, of Lokeren, for an imported invention of "A pump for raising liquids, and improved portable pump."—Dated 1st March, 1862.—(W. T. Vose's English Patent, 27th March, 1855.)

12,229. G. Kennis, of Froidmont, Liége, for "Manufacture of caustic baryta used for obtaining commercial alkalies."—Dated 3rd March, 1862.

12,230. J. Pirotte, of Liége, for "A machine for the manufacture of rivets."—Dated 5th March, 1862.

12,231. F. Spineux, of Liége, a Patent of Improvement for "Sights of fire-arms."—Dated 5th March, 1862.—(Original Patent, 21st November, 1861.)

12,232. J. B. Vandevelde, of Alost, a Patent of Improvement for "A machine for thrashing grains and heckling flax."—Dated 3rd March, 1861.—(Original Patent 14th September, 1861.)

12,233. F. Lutzenrath, of Bruges, for a Patent of Improvement for "An endless remontoir of watches, clocks, &c."—Dated 4th March, 1862.—(Original Patent, 7th March, 1861.)

12,234. Th. Van Hoonacker, of Bruges, for "A blowing apparatus for boilers of moveable engines."—Dated 4th March, 1862.

12,235. A. H. Blochouse, of Huy, for "A cup for lubricating steam engines."—Dated 5th March, 1862.

12,236. Laurens and Thomas, represented by H. Raclot, of Brussels, a Patent of Improvement for "A system of steam boilers."—Dated 28th February, 1862.—(A. E. Perignon's Original Patent, 15th October, 1857.)

12,237. R. Rowland, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in apparatus for the manufacture of white of lead and of vinegar."—Dated 28th February, 1862.—(English Patent, 18th October, 1861.)

12,238. Quenot and Lebargy, represented by H. Biebuyck, for an imported invention of "Improvements in the manufacture of hats."—Dated 28th February, 1862.—(French Patent, 24th February, 1862.)

12,239. S. and M. Cornely, represented by H. Biebuyck, of Brussels, for an imported invention of "Utilizing sulphate of lime obtained from stearine for industrial purposes."—Dated 28th February, 1862.—(French Patent, 11th January, 1862.)

12,240. F. Guzowski and E. Mathelin, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in shuttle plugs."—Dated 28th February, 1862.—(French Patent, 25th February, 1862.)

12,241. C. M. Pouillet, represented by H. Biebuyck, of Brussels, for an imported invention of "Construction of railways by using rails of a peculiar shape."—Dated 28th February, 1862.—(French Patent, 26th October, 1861.)

12,242. J. L. Waroquier, represented by H. Biebuyck, of Brussels, a Patent of Improvement for

"A water-closet."—Dated 28th February, 1862. —(Original Patent, 30th May, 1860.

12,243. H. Pirotte, represented by L. Anoul, of Ixelles, for "A machine for picking and cleaning wool."—Dated 4th March, 1862.

12,244. B. Cooper, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in machines for spinning and twisting filamentous substances."—Dated 4th March, 1862. —(English Patent, 13th August, 1861.)

12,245. F. J. Vanden Vinne, of Brussels, for "A machine for excavating the soil."—Dated 1st March, 1862.

12,246. Malliar-Lamblot, represented by D. Dérode, of Schaerbeek, for an improved invention of "A double action cock."—Dated 1st March, 1862.—(French Patent, 18th February, 1862.)

12,247. J. B. Kendall, represented by L. Anoul, of Ixelles, for an imported invention of "Double horse shoes."—Dated 1st March, 1862.—(French Patent, 27th February, 1862.)

12,248. J. L. Lemaire-Daîmé, represented by X. Raclot, of Brussels, for "An apparatus for the manufacture of cigarets."—Dated 1st March, 1862.

12,249. Coignet and Co., represented by A. Crooy, of Brussels, for an imported invention of "Furnaces with a steady and uniform temperature."—Dated 3rd March, 1862.—(French Patent, 13th March, 1861.)

12,250. J. Cliff, represented by A. Crooy, for an imported invention of "Improvements in glazing grey and red stoneware, porcelain, &c."—Dated 3rd March, 1862.—(English Patent, 26th February, 1862.)

12,251. S. G. Reynolds, represented by L. Anoul. of Ixelles, for an imported invention of "Improvements in steam hoes."—Dated 3rd March, 1862. —(French Patent, 28th February, 1862.)

12,252. E. N. Schmitz, represented by X. Raclot, of Brussels, for an imported invention of "A smoke consuming apparatus called 'Reverberatory blow pipe.'"—Dated 3rd March, 1862.—(French Patent, 27th May, 1861.)

12,253. L. Geens, of Ghent, a Patent of Improvement for "A coffee machine."—Dated 6th March, 1862.—(Original Patent, 4th February, 1861.)

12,254. W. Baines, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in metal girders, frames, &c."—Dated 5th March, 1862. —(English Patent, 22nd August, 1861.)

12,255. H. B. Coathupe, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in obtaining and applying embossed or engraved metal surfaces." —Dated 5th March, 1861.—(English Patent, 9th October, 1861.)

12,256. L. Droissart and H. L Jacot, represented by A. Calvet, of Brussels, for an imported invention of "Improvements in manometers."—Dated 5th March, 1862.—(French Patent, 2nd November, 1861.)

12,257. A. Durand, represented by A. Calvet, of Brussels, for an imported invention of "A conducting rein for horses."—Dated 5th March, 1862. —(French Patent, 11th February, 1862.)

12,257. J. B. Fauché, represented by A. Calvet, of Brussels, for an imported invention of "A motive machine, called 'Gravitaulic engine.'"—Dated 5th March, 1862.—(French Patent, 3rd April, 1861.)

12,259. E. Chatonet, represented by A. Calvet, of Brussels, for an imported invention of "A machine for partially rolling the covers of boxes of preserved food."—Dated 5th March, 1862.—(French Patent, 6th November, 1860.)

12,260. M. Helson, of Charleroi, a Patent of Improvement for "A system of rollers for welding by means of compression."—Dated 8th March, 1862. —(Original Patent, 9th March, 1861.)

12,261. J. Hoorickx and K. Lekieffre, of Brussels, for "An apparatus called 'Condensing tank,' applicable to steam engines."—Dated 6th March, 1862.

12,262. P. Effertz, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in machines for the manufacture of bricks, tiles, drains, &c."—Dated 7th March, 1862.—(English Patent, 5th September, 1861.)



FRANCE.

Current List of Patents of Invention and Certificates of Addition.

1861.

(Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.)

Note.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

51,292. Abeilhou, of 15, Rue Corps Saint, Avignon, for "A product called 'typhozoic felt.'" —Dated 8th October, 1861.

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* For the French Patent Law see No. 228 of this Journal.

51,293 Ansaldy, of 30, Quai du Canal, Marseille, for "Improvements in hemp cables."—Dated 22nd July, 1861.

51,294. Auvray, of Olivet, near Orleans, for "A mode of obtaining frames for paintings, mirrors, enamels, porcelain, and fayence, by means of a supple pressure."—Dated 5th October, 1861.

51,295. Baillargeon, of Rennes, for "An inflexible bow, called 'Rigid bow.'"—Dated 3rd October, 1861.

51,296. Bontron, of Chambery, for "A process for preventing wood from fouling by means of a cement."—Dated 7th October, 1861.

51,297. Brasseur, of 1, Rue Sans Pari, of Lille, for "An apparatus for extinguishing fires by steam."—Dated 7th October, 1861.

51,298. Chevalier, of Uzès, for "A mode of twisting and throwing silk."—Dated 7th October, 1861.

51,299. The Condemine Coal and Schist Company, represented by Pastey and Co., of Bruxières la Grece, for "Applying the steam of water or gas to distilling schist, coal, boghead, and all substances that can be distilled."—Dated 8th October, 1861.

51,300. Dast, of Denain, for "A distilling and rectifying apparatus."—Dated 7th October, 1861.

51,301, Ferné, of 73, Rue Ducan, Bordeaux, for "Animalizing Manilla hemp, Siam hemp, jute, and esparto, by means of steam and condension, applicable to cloth and other tissues, and to lace-work."—Dated 5th October, 1861.

51,302. Fournet, of Périgueux, for "Improvements in pincers for patches."—Dated 4th September, 1861.

51,303. Guérin, of Mayenne, for "A force pump without suction."—Dated 9th October, 1861.

51,304. Guirand, of 4, Traverse St. Charles, Marseille, for "Cartridges for mines."—Dated 2nd October, 1861.

51,305. Lecocq, of Raismes, for "A motor with a temporary motion by means of artificial magnets, and with a perpetual motion by means of the magnetism of natural magnets."—Dated 8th October, 1861.

51,306. Ledoux, of 62, Rue du Faubourg St. Denis, Paris, for "A regulator applicable to penholders."—Dated 26th September, 1861.

51,307. Lefèvre-Lefebvre, of St. Quentin, for "Cast-iron chimney-tops."—Dated 5th October, 1861.

51,308. Marcelin, jun., of Clermont-Ferrant, for "A kind of sweet-meat combined with chocolate and vegetables."—Dated 1st October, 1861.

51,309. Miroux, of Anzin, for "Manufacture of nuts."—Dated 4th October, 1861.

51,310. Moll, of 1, Place du Parlement, Bourdeaux, for "Railways with different gauges for the passage of carriages of various widths."—Dated 4th October, 1861.

51,311. Perrin, of Vuillafans, for "A double action lift and force pump without bifurcation."—Dated 7th October, 1861.

51,312. Portalier, of Saint Malo, for "An instantaneous mode of unmounting the chief parts of guns and pistols."—Dated 5th October, 1861.

51,313. Rigola, of 8, Rue Boilcau, Nantes, for "A counting and registering apparatus applicable to all kinds of industries."—Dated 10th October, 1861.

51,314. Roeck, of 6, Rue du Griffon, Lyons, for "Applying or using silky substances and silk-waste in the manufacture of paper, cards, and pasteboard."—Dated 4th October, 1861.

51,315. Rollet, of St. Martin le Colonel, for "Safety rods of shooting guns."—Dated 26th September, 1861.

51,316. Sallé, of Soulangy, for "Compound paste for softening spun cotton, &c."—Dated 7th October, 1861.

51,317. Saumur, of l'Aigle, for "A kind of machine called 'Universal press,' applicable to the manufacture of coin and all metal articles that may be cut, punched, beaten, stamped, or pressed."—Dated 7th October, 1861.

51,318. Sauvageon, of Valencia, for "An electro-therapic workshop for curing silk-worms."—Dated 30th September, 1861.

51,319. Serret, Hamoir, Duquesne, and Co., of Valenciennes, for "Improvements in the manufacture of sugar."—Dated 9th October, 1861.

51,320. Triaire, of St. André de Majencoules, for "A coffin-stand."—Dated 3rd October, 1861.

51,321. Voytier, Son, and Frécon, of 7, Rue des Creuses, St. Etienne, for "Pistols loaded by means of a single capsule or priming with a screwless nipple applicable to the back of the barrel."—Dated 5th October, 1861.

51,322. Adam, of 52, Rue St. Sauveur, Paris, for "A kind of water-closet."—Dated 26th September, 1861.

51,323. Barton and Soar, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "A machine for bleaching, washing, wringing, dyeing, and callandering."—Dated 28th September, 1861.—(English Patent, 30th March, 1861.)

51,324. Biétry, of 41, Boulevart des Capucins, Paris, for "A kind of borders and fringes of shawls."—Dated 27th September, 1861.

51,325. Boivin, of 22, Rue St. Jean, St. Etienne, for "Preparing the muffle used in the manufacture of military or fancy fire-arms made by the rolling mill."—Dated 10th October, 1861.

61,326. Bourry, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Imitating embossed work on all kinds of stuffs after being woven." Dated 28th September, 1861.

61,327. Briet, of 41, Rue St. Sébastien, Paris, for "Improvements in smoking pipes."—Dated 28th September, 1861.

61,328. Caudroy and Yot, represented by Guion' of 29, Boulevart St. Martin, Paris, for "Improvements in gas-burners."—Dated 3rd August, 1861.

51,329. Clark, represented by Castelbon, of 15, Passage des Petites-Ecuries, Paris, for "A mode of indicating the position of trains in tunnels, and preventing railway accidents thereby." — Dated 27th September, 1861. — (English Patent, 19th September, 1861.)

51,330. Derombies, of 196, Rue du Faubourg St. Martin, Paris, for "A steam generator."—Dated 27th September, 1861.

51,331. Deroy, of 15, Rue des Entrepreneurs, Grenelle, Paris, for "Improvements in apparatus for the manufacture of gas."—Dated 28th September, 1861.

51,332. Ducel and Son, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in metallic and other funeral garlands."—Dated 26th September, 1861.

51,333. Faucille, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Applying malleable cast-iron to industrial purposes."—Dated 26th September, 1861.

51,334. Gateau, of 28A, Rue Silvabelle, Marseille, for "A metallic filter for households."—Dated 8th October, 1861.

51,335. Gauthier, of 24, Rue du Grand, St. Michel, Paris, for "A shuttle with a pedal and optional pressure for sewing machines."—Dated 28th September, 1861.

51,336. Grandjean, of 1, Rue du Plâtre, Ste. Avoie, Paris, for "A mode of heating applicable to railway carriages."—Dated 28th September, 1861.

51,337. Gugnon, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Improvements in the manufacture of muslin glass."—Dated 28th September, 1861.

51,338. Guilleminault, Sistus, and Tassin, of 5, Rue de Ménars, Paris, for "Hygienic bonnets for ladies and children that cannot get out of shape."—Dated 1st October, 1861.

51,339. Harmant, of 10, Passage St. Pierre, Clichy la Garennne, for "A letter-box."—Dated 30th September, 1861.

51,340. Huyttens de Terbecq, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Arrangements in sieves for sorting ores and other substances."—Dated 28th September, 1861.

51,341. Japy, Brothers, and Co., represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in fire engines and other pumps."——Dated 28th September, 1861.

51,342. Lebre, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A machine for the manufacture of endless glass and emery paper."—Dated 30th September, 1861.

51,343. Linard, of 18, Rue d'Angoulême, St. Honoré, Paris, for "Improvements in the manufacture of sugar."—Dated 26th September, 1861.

51,344. MacCord and Maher, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in fire-arms."—Dated 28th September, 1861.

51,345. Mazet, Brothers, of 23, Rue des Cordeliers, Marseille, for "A pump of stoneware."—Dated 4th October, 1861.

51,346. Payoud, of 319, Rue St. Denis, Paris, for "A new system of dams."— Dated 1st October, 1861.

51,347. Pichio, with Jouaillon, 8, Rue Coquillière, Paris, for "A composition for preventing the incrustation of steam-boilers."—Dated 27th September, 1861.

51,348. Reynolds, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Ornamenting clay pipes."—Dated 26th September, 1861.

51,349. Rivoire, of 86, Cours Bourbon, Lyons, for "A sponge prepared for dilating the canal of the uterus."—Dated 5th October, 1861.

51,350. Sellier and Wattier, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A machine for combing wool."—Dated 30th September, 1861.

51,351. Talma, domiciled with Ducistalma, of 3, Rue de Lille, Paris, for "A combined pen wiper and paper weight." — Dated 20th September, 1861.

51,352. Tassin and Chabrol, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A slop pail with a clack-valve."—Dated 26th September, 1861.

51,353. Thirion, of 169, Rue de Vaugirard, Paris, for "Improvements in pumps in general."—Dated 26th September, 1861.

51,354. De La Baume, of 20, Rue de Courcelles, Paris, for "Improvements in propelling vessels."—Dated 30th September, 1861.

51,355. Anthony, represented by Zacharie, of 40, Rue de Bourbon, Lyon, for "Improvements in steam-boilers and generators."—Dated 14th October, 1861.—(English Patent, 10th September, 1861.)

51,356. Audouy, of Frossay, for "Telescopes for measuring distances." — Dated 14th October, 1861.

51,357. Bazin, Brothers, of Sourdeval la Barre, for "A machine for the manufacture of copper candlesticks with iron at the inside." — Dated 5th October, 1861.

51,358. Bérenger, jun., of 109, Rue de la Barrière, Elbeuf, for "Improvements in mechanical and hand weaving."—Dated 14th October, 1861.

51,359. Bielle and Arnaud, Brothers, of 22B, Rue Thears, Marseille, for "Porous brieks of baked clay."—Dated 14th October, 1861.

51,360. BIRE, sen., of Toulouse, for "Screw turbines for manufactures."—Dated 7th October, 1861.

51,361. CLERT, Son, of Niort, for "An apparatus with concentric cylinders for sifting seeds."—Dated 17th October, 1861.

51,362. COINTE, of Boves, for "A machine for raising water by means of centrifugal force applied to a truncated cone lying on its axis, &c."—Dated 17th October, 1861.

51,363. CORSIGLIA, of 59, Rue Monsieur, Lyons, for "A machine for making wire fences."—Dated 8th October, 1861.

51,364. CROIZIER-DERONZIÈRES, of 2, Rue Bodin, Lyons, for "A motive and mechanical loom for weaving silk fabrics called 'Taffeta.'"—Dated 10th October, 1861.

51,365. DESHAIES, of Chemin de la Collinière, Nantes, for "Seamless shoes."—Dated 15th October, 1861.

51,366. DUPONT, of 4, Boulevart de Sébastopol, Paris, for "A process for disinfecting mineral oils."—Dated 2nd October, 1861.

51,367. FORGET, of Beauvais, for "Improvements in fire arms."—Dated 7th October, 1861.

51,368. GRISAUD, of 30, Rue Grande, Lyons, for "An entry rake for the manufacture of tambouring embroideries, &c."—Dated 10th October, 1861.

51,369. HOUDANT, of 20, Rue Briconnet, Tours, for "Tools for the manufacture of mouldings of arm chairs and other centred pieces."—Dated 4th October, 1861.

51,370. LECLERC, of Briey, for "Harness for preventing horses from running away."—Dated 17th October, 1861.

51,371. LENNE-TRUFFAUT and RAIMBAULT, of Roubaix, Nord, for "A machine for the manufacture of figured fabrics."—Dated 16th October, 1861.

51,372. LÉVI, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Mechanical and self-acting manufacture of seamless cloth bags."—Dated 2nd October, 1861.

51,373. MATHIAN, of 54 and 56, Rue de Sully, Lyons, for "A boiler for hot water caloriferc stoves for heating hot houses and apartments."—Dated 8th October, 1861.

51.374. MAUZAIZE, of Chartres, for "A mill for husking and winnowing without manual labour fodder, such as trefoil, lucern, &c., and all dry seeds in general."—Dated 16th October, 1861.

51,375. MONIER and REYTIER, of 82, Route de la Révolte, St. Ouen, for "Treatment of fat substances."—Dated 2nd October, 1861.

51,376. MONGRUEL, of Grand Hôtel de Lyon, Rue Impériale, Lyons, for "A generator of cold steam applicable as a perfect carburator."—Dated 12th October, 1861.

51,377. OMBRY of 4, Rue des Quatre-Vents, Paris, for "A toy."—Dated 26th September, 1861.

51,378. OVIZE, represented by Feuillat, of 18, Rue Ferrandicre, Lyons, for "A mechanism for cordings of looms."—Dated 16th October, 1861.

51,379. PALMIÉ, represented by Thebault, of Rennes, for "Improvements in kilns and artificial hydraulic lime obtained by double firing."—Dated 10th October, 1861.

51,380. RAABE and Comp., of Rive-de-Gier, for "Means of obtaining a rotary motion on a fixed point in instruments used by glass workmen instead of the present to and fro rotary movements."—Dated 14th October, 1861.

51,381. SABATIER-DONZEL, of 15, Rue des Lombards, Nîmes, for "A mechanical core for the manufacture of 'cocks.'"—Dated 12th October, 1861.

51,382. SAUREL, of 9, Rue de la Lampèze, Nîmes, for "Manufacture of reps-broché, by using serge and satin cordings."—Dated 12th October, 1861.

51,383. SCHMID, of 2, Rue du Noyer, Strasbourg, for "So-called 'Everlasting foot-coverings.'"—Dated 15th October, 1861.

51,384. TAVERDON, of Metz, for "A double-action pump with pistons of impervious tissues."—Dated 14th October, 1861.

51,385. WALKLAND, of St. Pierre-les-Calais, for "A machine for folding lace into bands."—Dated 10th October, 1861.

51,386. OCCARIE, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Permanent closings of night stools."—Dated 4th October, 1861.

51,387. BERNHARD, represented by Larroque, of 24, Rue des Tournelles, Paris, for "Packing cases."—Dated 4th October, 1861.

51,388. BOUILLIN and PIRET, the former of 3, Rue Boulay-Batignolles, and the latter of 2, Place de la Promenade dc Batignolles, Monceaux, for "A helicoidal lubricating journal."—Dated 5th October, 1861.

51,389. BOYER, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Manufacture of so-called 'Siamese foot-coverings.'"—Dated 3rd October, 1861.

51,390. BRAMBACH, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "A process for obtaining lighting gas."—Dated 2nd October, 1861.

51,391. DEMAREST, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of the wood for bellows."—Dated 3rd October, 1861.

51,392. DE MEYER and Comp., represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "Improvements in the manufacture of pianos."—Dated 5th October, 1861.

51,393. DUMORT and LANGLOIS, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for

"Improvements in harrows or weeders with moveable teeth."—Dated 3rd October, 1861.

51,394. Duvergé, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A culinary distilling apparatus for the navy."—Dated 4th October, 1861.

51,395. Galli, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris. for "Improvements in smoke consuming apparatus." — Dated 4th October, 1861.

51,396. Guiraud, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Air-holes for baking ovens."—Dated 3rd October, 1861.

51,397. Herman, of 8, Rue Neuve, St. Augustin, Paris, for "Electrical targets."—Dated 3rd October, 1861.

51.398. Hitschler, of 17, Rue St. Benoît, Paris, for "A saw for cutting cylinders."—Dated 3rd October, 1861.

51,399. Humbert, of 54, Rue du Temple, Paris, for "A machine for the manufacture of forms for hats."—Dated 5th October, 1861.

51,400. Joly, domiciled with Demarest, of 5, Rue de Tracy, Paris, for "Applying a leather carrier used in flour-mills to the treatment of beetroot."—Dated 3rd October, 1861.

51,401. Klotz, Siess, and Coindreau, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Ornamenting light fabrics."—Dated 3rd October, 1861.

51,402. Lhermitte, of 13, Cours Vitton, Lyons, for "A perpetual motion."—Dated 16th October, 1861.

51,403. Loraux and Conem, represented by Bresson, of 51, Rue de Malte, Paris, for "Manufacture of bricks with tail-pieces and external dressing for ornamenting houses."—Dated 4th October, 1861.

54,404. Maillard, represented by Alart, of 15, Rue Vintimille, Paris, for "An apparatus for emptying cesspools by a vacuum."—Dated 5th October, 1861.

51,405. Marcelin, sen., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Plates with compartments, called 'Parisian plates.'"—Dated 4th October, 1861.

51,406. Martin, represented by Dreyfous, of 32, Rue de Bondy, Paris, for "Improvements in machines for carding and combing wool."—Dated 4th Octber, 1861.

51,407. Marthevon, of 26, Port St. Clair, Lyons, for "Manufacture of embossed velvet fabrics of various colours."—Dated 16th Octobcr, 1861.

51,408. Morel, Despiegeleer, and Maritz, the former of 41, Rue de Grenelle, the second of 70, Rue Croix-Nivart, and the latter of 26, Rue Neuve-Pigalle, Paris, for "Clarifying distilled oleic acid to be used for soap-making, without adding any other fat substances, and composing aluminous soap by using the alumen precipitated from its salts."—Dated 4th October, 1861.

51,409. Ramon de Mendiri, of 10, Rue Royer-Collard, Paris, for "A machine for printing with various colours."—Dated 5th October, 1861.

51,410. Roussel, of 17, Rue Gît-le-Cœur, Paris, for "Leather pieces for the manufacture of the heels of foot coverings."—Dated 5th October, 1861.

51,411. Rouyer, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A copying press."—Dated 3rd October, 1861.

51,412. Settle-Barff, represented by Brade, of 15, Rue Neuve Menilmontant, Paris, for "A process for hardening and preserving stone and other absorbing substances, being also applicable to th manufacture of artificial stone."—Dated 2nd October, 1861.—(English Patent, 9th July, 1861.)

51,413. Shanks, represented by John Wyber, of 3, Rue de Furstemberg, Paris, for "A washing machine for households."—Dated 3rd October, 1861.—(English Patent, 8th April, 1861.)

51,414. Simond and Canson, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Caoutchouc or gutta-percha capsules for hermetically closing bottles, flasks, or other vessels."—Dated 2nd October, 1861.

51,415. Sweney, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in the mauufacture of knapsacks."—Dated 5th October, 1861.

51,416. Tauntain and Coquet, the former of 10, Rue Amelie, the latter of 68, Boulevart Pigalle, Paris, for "A toy called 'Universal shuttle-cock.'"—Dated 5th October, 1861.

51,417. Touquet, domiciled with Feuillat, of 18, Rue de la Ferrandière, Paris, for "A tenter of cloth-beams."—Dated 19th Oetober, 1861.

51,418. Bellin and Company, of Sainte Pierre-les-Calais, for "Inserting muslin lace into press-point, and improving the bottom by ranging bars by the same stop, and in muslin especially by using a thread from bobbins, and a thread from warps."—Dated 9th October, 1861.

51,419. Bouasse, sen., of 29, Rue St. Sulpice, Paris, for "Improvements in copper plate presses."—Dated 25th September, 1861.

51,420. Brasseur, of 2, Rue Sans Pavé, Paris, for "An extracting apparatus for condensing heat."—Dated 21st October, 1861.

51,421. Cappeau, of 55, Rue St. Marc, Avignon, for "A process for increasing the proportion of alizarine in madder."—Dated 19th October, 1861.

51,422. Castelain, of 13, Rue des Urbanistes, Lille, for "A circular comb for mechanical combing."—Dated 21st October, 1861.

51,423. Chase, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in apparatus for feeding boilers."—Dated 29th August, 1861.—(English Patent, 23rd August, 1861.)

51,424. Cornu, of 47, Rue au Maire, Paris, for "An article for show-windows of shops."—Dated 7th October, 1861.

51,425. Cote, of 163, Rue de Sèvres, Paris, for "A powder for facilitating walking."—Dated 26th August, 1861.

51,426. Creamer, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in means for working railway breaks."—Dated 5th October, 1861.

51,427. Crevecœur, of Saint Pierre-les-Calais, for "A mode of arranging presspoint for cutting by stretching it broadways on a cylinder frame with graduated supports."—Dated 17th October, 1861.

51,428. Cristen, of 2, Rue des Beaux-Arts, Marseille, for "A holder for photographic manipulations."—Dated 19th October, 1861.

51,429. Delaporte, of 2, Boulevart Morland, Paris, for "Preparing bitters."—Dated 20th September, 1861.

51,430. Delhomme, sen., of Guerigny, for "A system of perpetual constructions."—Dated 20th October, 1861.

51,431. Guérin, domiciled with Branciard, of 10, Rue de la Barre, Lyons, for "Using east steel in the manufacture of ploughs."—Dated 19th October, 1861.

51,432. Gobin, of 19, Rue Grande Fusterie, Avignon, for "A bourrelet of straw, and of an elliptic shape."—Dated 19th October, 1861.

51,433. Hooman and Maliszewski, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in photographic impressions on glass or other transparent substances."—Dated 7th October, 1861.—(English Patent, 1st May, 1861.)

51,434. Jouvin and Chatrousse, of Grenoble, for "A process for dyeing tawed and other hides, used especially for gloves."—Dated 15th October, 1861.

51,435. De la Cuesta, of 9, Rue du Télégraphe, Montmartre, Paris, for "Pomatum for preserving the skin and hair."—Dated 30th September, 1861.

51,436. Lechangeur, with Robert, of 16, Rue Bourbon Villeneuve, Paris, for "A kind of liqueur."—Dated 21st September, 1861.

51,437. Lefebvre Son, and Paris, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Tempering steel."—Dated 7th October, 1861.

51,438. Lemercier, of 5, Rue du Coq-Saint-Jean, Paris, for "A steelyard."—Dated 7th October, 1861.

51,439. Lemercier and Cave, the former of 57, Rue de Sèvres, the latter of 5, Rue de Suresnes, Paris, for "A method of drawing, called 'Exercises and models of multiple controlling drawings.'"—Dated 7th October, 1861.

51,440. Meckenheim, represented by Castelbon, of 15, Rue des Petites-Ecuries, Paris, for "Processes and apparatus for obtaining and transmitting power by means of water and steam."—Dated 7th October, 1861.

51,441. Mondollot, Brothers, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvemente in the tubes of Seltz apparatus, arranged so as to wash the gas obtained therein."—Dated 5th October, 1861.

51,442. Palliser, represented by Le Blane, of 2, Rue Ste Appoline, Paris, for "Improvements in the manufacture of the liqueurs called 'Garibaldi nectar and orange cream.'"—Dated 21st September, 1861.

51,443. Pasquet-Roux, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the construction of fixed or moveable boilers."—Dated 5th October, 1861.

51,444. Peltier-Lelièvre, of St. Pierre les Calais, for "A safety lock."—Dated 18th October, 1861.

51,445. Pinel, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of knit head coverings."—Dated 7th October, 1861.

51,446. Potier, of 5, Rue des Carrières, Paris, for "Using flexible and close tin tubes for keeping pasty or unctuous substances."—Dated 21st September, 1861.

51,447. Rivière, of 4, Rue St. Rome, Toulouse, for "Rattan stays."—Dated 13th September, 1861.

51,448. Robert, of Melun, for "Bleaching spun rattan or cane, and applying said rattan to the manufacture of basket work."—Dated 3rd October, 1861.

51,449. Rostaing, of 8, Cours de Brosses, Lyons, for "Screw buffers for railways."—Dated 24th July, 1861.

51,450. Six, of Rue Vauban, Lille, for "Smoke-consuming furnaces."—Dated 21st October, 1861.

51,451. Berenger, jun., represented by Demeule, of Rue Berthelot, Elbeuf, for "Simultaneously sizing, drying, and weaving warps of fabrics."—Dated 24th October, 1861.

51,452. Chassort, of Gannat, for "A kind of plane."—Dated 25th October, 1861.



THE NETHERLANDS.

(*Communicated by His Excellency the Minister of the Interior.*)

List of Patents Delivered since the 4th February, 1862.*

(For previous List, see No. 846 of this Journal.)

1. F. Spitaels, of Brussels, represented by L. J. Vonk, of Gravenhage, for an imported invention of "New fire-places for locomotives."—15 years.—Dated 14th July, 1860.

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* For the Dutch Patent Law, see No. 289 of this Journal.

2. S. Carpmael, of London, represented by Vriesendorp and Gaade, of Gravenhage, for an imported invention of "Improvements in centrifugal apparatus for refining sugar."—15 years from the 15th September, 1859.—Dated 21st April, 1861.

3. C. van Ham, of Antwerp, represented by L. J. Vonk, of Gravenhage, for an imported invention of "An apparatus for drying malt and all kinds of grain and seeds for breweries, distilleries, and agricultural purposes."—15 years.—Dated 17th October, 1862.

4. G. H. Janssen, of Eysden, for an imported invention of "Improvements in churns."—5 years.—Dated 1st November, 1861.

5. P. G. Goorissen, of Gouda, for "A new mode of japanning hearths, stoves, safes, and other iron objects, coloured or black."—10 years.—Dated 27th January, 1862.

COLONIAL PATENT LAW.

CANADA.

Anno Vicesimo-Secundo

VICTORIÆ REGINÆ.

CAP. XXXIV.

An Act respecting Patents for Inventions.

Her Majesty, by and with the advice and consent of the Legislative Council and Assembly of Canada, enacts as follows:

Interpretation.

1. In this Act, the expressions "useful art, machine, manufacture or composition of matter," include any such thing herein referred to, whether it be made by hand or by machinery or by both of those means:—The word "Patent" means Letters Patent issued under this Act or any other law, for securing to the grantee the exclusive use and benefit of an invention or discovery;—The expression "Foreign Country" includes any country not under the British Dominion and subject to the Crown thereof. 12 V. c. 24, s. 20.

Who may obtain a Patent, and how.

2. The Minister of Agriculture shall receive all applications, drawings, descriptions, specifications, and models for or relating to Patents for inventions in this Province, and shall keep the records thereof. 20 V. c. 32, s. 4.

3. Any person being a subject of Her Majesty, and resident in this Province, having discovered or invented—any new and useful art, machine, manufacture, or composition of matter,— or any new and useful improvement on any art, machine, manufacture, or composition of matter,—the same not being known or used in this Province by others before his discovery or invention thereof, and not being at the time of the application for a Patent in public use or on sale in this Province with his consent or allowance as the inventor or discoverer thereof,—and desiring to obtain an exclusive property therein,—may apply by petition, in the manner provided by this Act, to the Governor of this Province, expressing such desire:

ii. And the Governor, on due proceedings being had as by this Act directed, shall grant such Patent, which shall be good and available to the said grantee, his heirs, lawful representatives or assigns, for the period of fourteen years from the granting of the same, after the Patent has been recorded in the manner directed by this Act,—and upon the assignment of the same previous to the grant aforesaid, for the same period, after such assignment has been recorded in the office of the Minister of Agriculture. 12 V. c. 24, s. 1, *and* 14, 15 V. c. 79, s. 13.

4. Any subject of Her Majesty being an inhabitant of this Province as aforesaid, who, by his industry, genius, efforts, and expense, has invented or produced—any new or original design for a manufacture, whether of any metal or mixed metals, or other material or materials,— or any new and original design for the printing of woollen, silk, cotton, or other fabrics,—or any new or original design for a bust, statue, or *bas relief*, or composition in *alto* or *basso relievo*,—or any new or original impression or ornament, or to be placed on any article of manufacture,—the same being formed in marble or other material,—or any new and useful pattern or print or picture to be either worked into or worked on, or printed or painted or cast, or otherwise fixed on any article of manufacture,—not known or used by others before his invention or production thereof, and prior to the time of his application for a Patent therefor,—and who desires to obtain an exclusive property or right therein, to make, use, sell, and vend the same or copies of the same to others, to be by them made, used, sold, or vended,—may make application in writing, by petition to the Governor therefor, expressing such desire:

ii. And the Governor, on due proceedings had as by this Act provided, may grant a Patent therefor as in the case of an application for a Patent:

iii. The duration of the said Patent shall be limited to fourteen years from the grant of the same, and all the regulations and provisions in this Act for the obtaining or protection of Patents, shall apply to applications for and to Patents granted under this section. 12 V. c. 24, s. 13, *and* 14, 15 V. c. 79, s. 3.

5. An original and true inventor shall not be deprived of the right to a Patent for his invention, by reason of his having previously taken out a Patent therefor in a foreign country, and of the same having been published at any time within six months next preceding the filing of his specification and drawing, as required by this Act. 12 V. c. 24, s. 4.

6. Every Inventor, before he can receive a Patent, shall make a solemn declaration that he verily believes that he is the true inventor or discoverer of the art, machine, or improvement for which he solicits a Patent:

ii. The said declaration may be made before any Justice of the Peace in this Province,—but when the applicant is not for the time being residing in the Province, the declaration shall be made before any Minister Plenipotentiary, *Chargé d'Affaires*, Consul or Agent, holding commission under the Government

of Great Britain, or any Notary Public of the Country in which such applicant happens to be at the time of making the same. 12 V. c. 24, s. 14,—*and* 14, 15 V. c. 79, s. 5—*parts.*

7. The Inventor shall deliver a written description or specification in duplicate of his Invention or Improvement, and of the manner or process of compounding the same, in such full, clear and exact terms as to distinguish the same from all other things before known, and to enable any person skilled in the art or science of which it is a branch, or with which it is most nearly connected, to make, compound, and use the same:

ii. In the case of any machine, he shall fully explain the principle and the several modes in which he has contemplated the application of that principle or character by which it may be distinguishad from other inventions:

iii. He shall accompany the whole with drawings and written references made in duplicate, where the nature of the case admits of drawings, or with specimens of the ingredients, or of the composition of matter, sufficient in quantity for the purpose of experiment:

iv. The said description or specification, signed by himself, and attested by two witnesses, shall be filed in the office of the Minister of Agriculture, and certified copies thereof shall be competent evidence in all Courts where any matter or thing touching Patent Right, shall come in question:

v. The applicant for a Patent shall be held to furnish duplicate drawings, whenever the case admits of drawings, one of which shall be deposited in the Office of the Minister of Agriculture, and the other shall be annexed to the Patent, and considered a part of the specification thereof,—And a copy of the specification shall be in all cases annexed to the Patent; 12 V. c. 24, s. 6—*part.*

vi. The inventor shall moreover deliver a model of the machine by him invented (if the Patent be for a machine), provided the Minister of Agriculture deems such model to be necessary. 14, 15 V. c. 79, s. 5.

8. All Patents granted under this Act shall recite briefly the substance of the Petition upon which they are granted, and shall contain a short description of the invention or discovery for which they are granted, referring for a fuller description thereof, and for more ample details, to the specification,—and shall grant to the Petitioner, his assigns and legal representatives, for the period of fourteen years from the granting of the same, the full and exclusive right and liberty of making, constructing, using and vending to others to be used, the said invention or discovery. 14, 15 V. c. 79, s. 3—*part.*

9. All such Patents shall, before the same are presented to the Governor for his signature, and before the Great Seal of the Province is thereunto affixed, be examined by Her Majesty's Attorney General or Solicitor General for Upper or Lower Canada, who, if he finds them conformable to Law, shall certify accordingly, and they shall then be presented to the Governor for his signature, and the Great Seal of the Province shall be thereunto affixed after they have been signed by him, and they shall be good and available to the Grantee, after they have been recorded in a Book to be kept for that purpose in the office of the Minister of Agriculture, and shall, when so recorded, be delivered by the proper officer to the Patentee or his order. 14, 15 V. c. 79. s. 3—*part.*

Patents for Inventions brought by Canadians from Foreign Countries.

10. The privileges, clauses, provisions, powers and legal remedies intended and mentioned by this Act, and which are secured to, imposed upon, and apply to the inventor and discoverer of any new and useful art, machine, manufacture, or composition of matter, for which he may make application for a Patent—shall extend to and include any Subject of Her Majesty, being an inhabitant of this Province, who in his or her travels in any foreign country has discovered or obtained a knowledge of, and is desirous of introducing in this Province, any new and useful art, machine, manufacture, or composition of matter, not known or not in use in this Province, before his application for a Patent for the same:

ii. Except nevertheless, that nothing in this Section shall extend to inventions or discoveries of any new and useful art, machine, manufacture, or composition of matter, made, discovered or used in the United States of America, or in any part of Her Majesty's Dominions in Europe or America, or shall prevent the free importation thereof into this Province, for sale, by any person or persons, or for their use or otherwise, from the United States or from Her Majesty's said Dominions. 14, 15 V. c. 79, s. 11.

11. The person so desirous of introducing into this Province any invention, art, machine, manufacture, or composition of matter, which he has discovered or obtained a knowledge of in any foreign country, shall, previous to obtaining a Patent for the same, make a solemn declaration, in the manner prescribed in this Act as to inventors and discoverers, that he believes himself to be the first introducer or publisher of such invention, art, machine, manufacture, or composition of matter in this Province, and that he discovered or obtained a knowledge thereof while on his travels in some foreign country not being one of the United States of America or any of Her Majesty's Dominions in Europe or America. 14, 15 V. c. 79, s. 12.

Assignment of Patents.

12. Every Patent, whensoever issued, shall be assignable in law either as to the whole interest or any undivided part thereof, by an instrument in writing, which assignment (and also every grant and conveyance of the exclusive right under any Patent to make and use, and to grant to others to make and use, the thing patented, within and throughout this Province,) shall be recorded in the Office of the Minister of Agriculture within two months from the execution thereof. 12 V. c. 24, s. 5,—*and* 14, 15 V. c. 79, s. 6.

13. Every Patent may be made and issued to the Assignee of the inventor or discoverer, the assignment thereof being first recorded as aforesaid, and the application therefore being duly made, and specifications duly and solemnly declared by the said inventor. 12 V. c. 24, s. 6—*part.*

Patent to Representatives of deceased Inventor.

14. When any Subject of Her Majesty, being an inhabitant of this Province as aforesaid, hath made any new invention, discovery or improvement, on account of which a Patent might, by virtue of this Act, be granted, and such person dies before any Patent is granted therefor,—the right of applying for and obtaining such Patent shall devolve on the

Executor or Administrator of such person, in trust for the *heir at law* of the deceased, if he died intestate, or on his legal representative in any other case, —in as full and ample a manner, and under the same conditions, limitations and restrictions, as the same was held or might have been claimed or enjoyed by the deceased in his lifetime;—And when the application is made by such executor, administrator or representative, the declaration required to be made and taken shall be so varied as to be applicable to him. 12 V. c. 24, s. 3.

Interfering Applications for a Patent.

15. In cases of interfering applications for any Patent, the same shall be submitted to the arbitration of three skilled persons, one of whom shall be chosen by each of the applicants, and the third person shall be chosen by the Minister of Agriculture, or by his Deputy or the person appointed to perform the duty of that office;—And the decision or award of such Arbitrators, or any two of them, delivered to the Minister of Agriculture in writing, and subscribed by them, or any two of them, shall be final as far as respects the granting of the Patent:

ii. If either of the applicants refuses or fails or choose an Arbitrator, when required so to do by the Minister of Agriculture, the Patent shall issue to the opposite party;—And when there are more than two interfering applicants, and the parties applying do not all unite in appointing three Arbitrators, the Minister of Agriculture or his Deputy, or person appointed to perform the duty of that office, may appoint the three Arbitrators for the purposes aforesaid. 14, 15 V. c. 79, s. 9.

Extension of the Term of a Patent.

16. Whenever any Patentee desires an extension of his Patent beyond the term of its limitation, he may apply therefor in writing to the Governor, setting forth the grounds thereof, and causing the notice of such application to be published three times each in the *Canada Gazette*, and in two other Newspapers published respectively in the English and French languages in that section of the Province in which he resides, and such notice shall mention also the time of the said application, so that any person may appear and show cause why the extension should not be granted:

ii. The President of the Executive Council, the Attorney-General for that part of the Province in which the applicant resides, and the Minister of Finance, shall constitute a Board to hear and decide upon the said application and the objection thereto, if such there be, and shall sit for that purpose at the time designated in the published notice thereof, at the office of the Minister of Agriculture where the seat of the Provincial Government then is; and a true statement on oath by the Patentee shall be then and there submitted to the said Board, of the ascertained value of the invention, and of the receipts and expenditure in detail, exhibiting a true and faithful account of the loss or profit in any manner accruing to him from the same:

iii. If upon a hearing of the matter it appears to the Board (having due regard to the public interest therein) that the said term ought to be extended, by reason of the Patentee, without fault on his part, having failed to obtain from the use and sale of his invention a reasonable remuneration for the time, ingenuity, and expense bestowed thereon, and the introduction thereof into use, the said Patent shall be renewed and extended by making thereon a certificate by the said Board of such extension for the term of seven years from and after the expiration of the first term, which certificate, with a certificate of the judgment and opinion of the said Board, shall be entered in the Office of the Minister of Agriculture, and the said Patent shall thereupon have the same effect in law as if it had been originally granted for the term of twenty-one years. And the benefit of such renewal shall extend to Assignees and Grantees of the right to use the thing patented, to the extent of their respective interest therein:

iv. But no extension of a Patent shall be granted after the expiration of the term sought to be extended, nor unless the petition or application therefor is presented six months at the least before the expiration of such term. 12 V. c. 24. s. 11.

Amending Patents.

17. Whenever any Patent, whensoever granted, is inoperative or invalid by reason of a defective or insufficient description or specification, then, if the error has arisen from inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, the Patentee may surrender such Patent and obtain a new Patent to be issued to him for the same invention for the residue of the unexpired period of the original Patent, in accordance with the Patentee's corrected description and specification:

ii. In case of the Patentee's death or of any assignment by him made of the original Patent, a similar right shall vest in his executor, administrator, or legal representative:

iii. The Patent so re-issued, together with the corrected description and specification thereof, shall have the same effect and operation in law on the trial of all actions thereafter commenced for causes subsequently accruing, as if the same had been originally filed in such corrected form before the issuing of the original Patent. 12 V. c. 24, s. 7.

Disclaiming part of an Invention.

18. Whenever, by mistake, accident, or inadvertence, and without any wilful default or intent to defraud or mislead the public, any Patentee has made his specification of claim too broad, claiming more than that of which he was the original or first inventor, some material and substantial part of the thing patented being truly and justly his own, or has in his specification claimed to be the original and first inventor or discoverer, of any material or substantial part of the thing patented, of which he was not the first and original inventor, and which he has no legal or just right to claim, in every such case the said Patentee, his executor, administrator, legal representative, or assignee, whether of the whole or of a fractional interest thereof, may make disclaimer of such parts as he does not claim to hold by virtue of the Patent or assignment thereof, stating in the said disclaimer the extent of his interest in such Patent:

ii. Such disclaimer shall be in writing, attested by one witness and recorded in the Office of the Minister of Agriculture, and shall be thereafter taken and considered as part of the original specification, to the extent of the interest possessed in the Patent or right secured thereby by the disclaimant or by those claiming by or under him subsequent to the entry thereof:

iii. Such disclaimer shall not affect any action pending at the time of its entry, except so far as relates to the question of unreasonable neglect or delay in filing the same:

iv. The Patent shall be deemed good and valid for so much of the invention or discovery as is truly and bonâ fide the disclaimant's own, or is not disclaimed, provided it is a material and substantial part of the thing patented, and is definitely distinguished from other parts so claimed without right as aforesaid:

v. The Patentee, his executor, administrator, or legal representative or assignee, whether of the whole or a fractional interest therein as aforesaid, may maintain a suit at law or in equity on such Patent for any infringement of so much of the invention or discovery as is bonâ fide his own as aforesaid, notwithstanding such disclaimer or larger specification as aforesaid. But in case of judgment on verdict in his favour, he shall not be entitled to recover costs against the defendant, unless he has entered as aforesaid in the Office of the Minister of Agriculture, the said disclaimer of all that part of the thing patented so claimed without right. And no person bringing such suit shall be entitled to the benefit of this section who has unreasonably neglected or delayed to enter in the said Office the disclaimer as aforesaid. 12 V. c. 24, s. 8.

Amending Specification, Drawings, &c., to be amended, or filing new ones.

19. Whenever any application is made to the Governor for any addition of a newly discovered improvement to be made to an existing Patent,—or whenever a Patent is returned for correction and re-issue,—the specification of claim annexed to such Patent shall be subject to revision and restriction in the same manner as original applications for Patents; and such improvement shall not be granted in the one case, nor the re-issue allowed in the other case, until the applicant has entered a disclaimer or altered his specification of claim in accordance with the revision or restriction thereon: 12 V. c. 24, s. 9.

ii. Whenever a Patent is returned for correction and re-issued, and the Patentee claims several Patents to be issued for distinct and separate parts of the thing patented, the same shall be granted in the same manner as original Patents:

iii. But no addition of an improvement shall be made to any Patent theretofore granted, nor shall any new Patent be issued for an improvement made in any machine, manufacture or process, to the original inventor, assignee or possessor of a Patent therefor, nor shall any disclaimer be admitted to entry—until a duplicate model and drawing of the thing originally intended, verified as aforesaid, has been deposited in the proper Office therefor:

iv. Nor shall any Patent be granted for an invention, improvement or discovery, the model or drawing of which has been lost, until another model and drawing has been in like manner deposited. 12 V. c. 24, s. 10.

Repeal of Patents on Scire Facias.

20. Any person desiring to impeach any Patent, whether issued under this Act or under any Act (of this Province) as having been fraudulently or surreptitiously obtained, or issued improvidently or upon false suggestion, may obtain an exemplification under the Great Seal of this Province, of such Patent, and of the petition or application therefor, and of the drawings and specifications thereunto relating,—and may have the same filed in the office of the Prothonotary or Clerk of the Superior Court for Lower Canada or of the Court of Queen's Bench or Common Pleas for Upper Canada, according to the section of the Province in which such repeal is sought:

ii. The Patent, the petition or application, drawing and specification aforesaid, so exemplified, shall thereupon be considered and held by the Court as remaining of record therein, so that a Writ of *scire facias* under the seal of the Court may issue grounded upon the said record, for the purpose of repealing such Patent for legal cause as aforesaid, if upon the proceedings had upon the said Writ of *scire facias*, according to the law and practice of the Court of Queen's Bench in England, and under the provisions of this Act, the Patent so sought to be repealed is adjudged and declared void:

iii. A certificate of such judgment shall, at the request of any person or party, be entered upon the margin of the enrolment of such Patent, in the Office of the Minister of Agriculture, whereupon the said Patent shall be considered to be cancelled and made void from the entry thereof:

iv. But no such *scire facias* shall issue or proceedings thereon be had, unless the Writ issues and is returned into Court in a term of the Court, within two years after the grant of the said Letters Patent, or in the term or session of the Court next after the said two years, and not afterwards. 12 V. c. 24, s. 17.

Rights of Patentees and others as to things Patented.

21. Any person who has discovered an improvement in any machine or composition of matter which has been patented, and has obtained a Patent for such improvement, shall not be at liberty to make, use or vend the original invention, but the improvement only;—nor shall the first inventor be at liberty to use the improvement; and simply changing the form or the proportion of any machine or composition in any degree, shall not be deemed a discovery. 14, 15 V. c. 79, s. 4.

22. Every person, or corporation established in this Province, having purchased, constructed, invented or discovered, as aforesaid, any new machine, manufacture, or composition of matter, prior to the application for a Patent therefor by a person claiming to be the inventor or discoverer thereof,—shall possess the right to use and vend to others to be used, the specific machine, manufacture, or composition of matter, so made, purchased, or introduced, without liability therefor to the Patentee or any other person interested in such invention;—And no Patent shall be held to be invalid by reason of such purchase, sale or use, prior to the application for such Patent as aforesaid, except on proof of abandonment of such invention to the public, or that such purchase, sale or prior use existed for more than one year prior to such application for a Patent. 12 V. c. 24, s. 12.

23. If any person without the consent of the Patentee, his assigns or other lawful representatives, first obtained in writing,—makes or manufactures for sale any article or composition so invented, or makes or manufactures or makes use of any instrument or

machinery so invented or specified,—the exclusive right of which has been secured to any person by Patent,—the person so infringing such Patent shall be liable to an action for the same, in which, besides such damages as may be awarded by the Jury, the party injured shall also recover treble costs, to be taxed according to the course and practice of the Court in which the action is brought. 14, 15 V. c. 79, s. 7.

24. In any action for damages for making, using or selling the thing whereof the exclusive right is secured by any Patent whensoever granted, the issue shall be tried by a jury, and if a verdict is rendered for the Plaintiff, the Court may render judgment on such verdict, to the amount found by such verdict, as the actual damages sustained by the Plaintiff, with treble costs; and such judgment shall be enforced and recovered in the same manner and by the same proceedings at law, as are used and in practice in that part of this Province in which the action is brought as to any other judgment for damages. 12 V. c. 24, s. 2—*part.*

25. Whenever it satisfactorily appears that the Patentee at the time of making his application for the Patent, believed himself to be the first inventor or discoverer of the thing patented, the Patent shall not be held to be void on account of the invention or discovery or part thereof, having been before known or used in a foreign country, if it does not appear that the same or any material or substantial part thereof, had before been patented or described in any printed publication. 12 V. c. 24, s. 2—*part.*

26. And whenever the Plaintiff fails to sustain his action, on the ground that in his specification of claim is embraced more than that of which he was the first inventor or discoverer,—or if it appears that the Defendant had used or violated any part of the invention, justly and truly specified and claimed as new, the Court may adjudge and award, as to costs, as appears to be just and equitable. 12 V. c. 24, s. 2—*part.*

27. But a Defendant in any such action may specially plead any matter of defence thereto, specified in this Act or in any former law under which the Patent was granted. 12 V. c. 24, s. 2—*part.*

ii. And if at the trial in any such action, it is made apparent, to the satisfaction of the Court (the defendant having specially pleaded the same) that the specification filed by the Patentee does not contain the whole truth relative to the invention or discovery to which it refers,—or that it contains more than is necessary to produce the described effect (such concealment or addition fully appearing to have been made for the purpose of deceiving the public),—or that the thing thus secured by Patent was not originally discovered by the Patentee or party claiming to be the Inventor or Discoverer in the specification referred to in the Patent, but had been in use, or had been described in some public work, anterior to the supposed discovery of the Patentee, —or that he had surreptitiously obtained a Patent for the invention or discovery of another person,— in either of the said cases, judgment shall be rendered for the defendant, with costs, and the Patent shall be declared void. 14, 15 V. c. 79, s. 8.

Patented Articles to be marked as such.

28. Every Patentee and Assignee of a Patent granted after the thirtieth day of May, 1849, shall stamp, or engrave, on each article vended or offered for sale, the date of the Patent thereof; And any person patented or assigned neglecting so to do shall be deemed to have committed a misdemeanor, and shall be liable therefor to the same penalties as are provided in the next following section. 12 V. c. 24, s. 16.

29. If any person writes, paints, prints, moulds, casts, carves, engraves or stamps upon any thing made, used, or sold by him, for the sole making or selling of which he has not obtained a Patent, the name, or any imitation of the name of any Patentee for the sole making or vending of such thing, without the consent in writing of such Patentee or of his assigns or legal representatives,—or if any person, upon any such thing not purchased from the Patentee or from his assignee or representative or from a vendee, or not having his licence or consent in writing,—writes, paints, prints, moulds, casts, carves, engraves, stamps, or otherwise makes or affixes the word or words "Patent," "Letters Patent," "by the Queen's Patent," "Patented," or any word or words of like kind, meaning or import, with the view or intent of imitating or counterfeiting the stamp, mark or other device of the Patentee,—or affixes the same, or any word, stamp or device of like import, on any unpatented article, for the purpose of deceiving the public,—he shall be deemed to have commited a misdemeanor, and shall be punished by fine, or by imprisonment, or by both fine and imprisonment, at the discretion of the Court; but the fine shall not exceed two hundred dollars in amount, and the imprisonment shall not exceed three months in duration. 12 V. c. 24, s. 15.

Fees under this Act.

30. Every Applicant presenting a petition and signifying his desire to obtain a Patent under this Act, shall pay into the hands of the Minister of Agriculture, or his deputy or person appointed to perform the duty of that office, the fee of twenty dollars, which shall be in full of all fees payable by him with respect to such Patent, and for all services by what Public Officer soever peformed, in relation thereto, whether by such Minister of Agriculture, or any other:

ii. Except that for every copy or exemplification required at the office of the said Minister, of the enrolment of any such Patent, or of the specification or other document relating thereto, the person obtaining such copy shall pay at the rate of twenty cents for every folio of seventy-two words, and a further sum of two dollars for affixing the Great Seal to the exemplification of any such Patent; And for every copy of any drawing relating to such Patent, the Party entitled to and obtaining the same shall pay such sum as the Minister of Agriculture, or his deputy, or person performing his duty as aforesaid, considers a reasonable compensation for the time and labour expended thereon. 14, 15 V. c. 79, s. 10.

Patents under former Acts.

31. All Patents lawfully issued under any Act of the Parliament of Upper or of Lower Canada, then in force but now repealed, shall remain in force and be of the same effect, as if the Act under which they were issued had not been repealed, but subject to the provisions of this Act, all the enactments whereof shall apply to them. 14, 15 V. c. 79, ss. 2, 13.

32. All Patents granted after the thirtieth day of May, 1849, whether under the provisions of the said Acts of Upper and of Lower Canada, or of this Act shall extend and be privileged throughout the whole Province of Canada. 12 V. c. 24, s. 18—*part.*

33. Every Patent for an invention issued after the Union of Upper and Lower Canada, but before the said thirtieth day of May, 1849, shall extend and apply and shall be held to have extended and applied upon and since the tenth day of June, 1857, to and throughout the whole Province of Canada, and all the provisos, conditions, reservations and restrictions contained in this Act and applicable to Patents generally, shall apply to such Patents, and to all matters incident thereto; and any such Patent shall, as regards that section of the Province for which it was not originally granted, convey to the holder of such Patent all the privileges conferred by this Act, for and during the remainder of the term for which such Patent was originally granted, and shall be renewable for the whole Province for the period and under the conditions prescribed in the sixteenth section of this Act:

ii. Except always, that every person or corporation in that section of the Province to which such Patent extends solely by virtue of this section, who had purchased, constructed, or used within such section of the Province, prior to the said tenth day of June, 1857, any machine, manufacture, or composition of matter included in such Patent, shall possess the right to use and vend to others to be used, the specific machine, manufacture or composition of matter so actually purchased, constructed, or used by him before the day last aforesaid without liability to the Patentee or other person interested in the invention for which such Patent was granted, as regards such section of the Province. 20 V. c. 33, s. 1.

34. Whenever any party holding a Patent for any such invention, issued before the Union of Upper and Lower Canada, under the authority of any Act of either of the said former Provinces, has, under the provisions of the first section of the Act 14, 15 V. c. 79, obtained a Patent available in that section of the Province not embraced by the Patent first issued as aforesaid, such subsequent Patent shall be subject to all the provisos, conditions, reservations and restrictions mentioned and contained in this Act, and shall, as regards the section of the Province to which it extends the privileges of the grantee, secure to the grantee all the privileges conferred by this Act, for and during the period of fourteen years,—and shall, for such section of the Province as aforesaid, be renewable for the period and under the conditions prescribed in the sixteenth section of this Act:

ii. But nothing in this section shall be construed to extend the period limited by any Patent issued under either of the said Acts of the late Provinces of Upper or Lower Canada, within the section of the Province to which the Patent is thereby confined:

iii, And every person or corporation in that section of the Province to which such Patent extends solely by virtue of this section, who had purchased, constructed, or used, within such section of the Province as last aforesaid, any machine, manufacture or composition of matter, included in such Patent prior to the application therefor by the party entitled thereto, under the enactment referred to in this section, shall be held to possess the right to use and to vend to others to be used, the specific machine, manufacture or composition of matter, so actually purchased, constructed or used by him before such application as aforesaid, without liability to the Patentee or other person interested in the invention for which Letters Patent have been obtained as aforesaid, for such section of the Province. 14, 15 V. c. 79. s. 1.

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Germany, No. 435.
Hanover, No. 231.
India, Nos. 240, 348, and 552.
Jamaica, No. 660.
Mexico, No. 496.
Netherlands, No. 289.
New South Wales, No. 386.
Norway, No. 665.
Prussia, Nos. 313 and 329.
Parma, Piacenza, and Guastalla, No. 321.
Portugal, No. 325.
Poland, No. 335.
Roman States, No. 319.
Russia, Nos. 334 and 508.
Sardinia, Nos. 233, 235, 636, 637, 639, and 640.
Saxony, No. 236.
Sicilies (the Two), No. 316.
Spain, No. 323.
Sweden, Nos. 327 and 354.
United States of America, Nos. 638, 646, nd 789.
Victoria, Nos. 186 and 359.
Wurtemberg, No. 314.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s.*

EXTENSION OF PATENTS TO THE COLONIES. Abstract of Replies to the Secretary of State's Circular Despatch of January 2, 1853, on the subject of the Extension of Patents for Inventions to the Colonies. Second Edition, with revised Table, 1861. Price 2*s.*

List of Specifications published during the week ending 15th March, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
1961	10*d.*	Miles, D.—Window sashes.
1962	10*d.*	Lesueur, N. A.—Covering for houses, &c.
1963	6*d.*	Hughes, E. T.—(*A communication from J. M. Rey, junior.*)—Wheelbarrow wagon.
1964	6*d.*	Mennons, M. A. F.—(*A communication from A. Rousseau.*)—Breech-loading fire-arms.
1965	3*d.*	Rogers, W. R.—Dowelling.
1966	6*d.*	Webb, T. G.—Manufacture of articles of glass.
1967	10*d.*	Viollier, L. W.—(*A communication from A. Ratignez.*)—Doubling and twisting yarns and threads, and manufacturing wire rope.
1968	3*d.*	Eastwood, J., and Eastwood, T. C.—Yarn.
1969	7*d.*	Maillard, N. D. P.—Motive-power engines.
1970	3*d.*	Gedge, J.—(*A communication from Mons. St. Marc, junior.*)—Threshing grain.
1971	3*d.*	Coldwell, J., and Coldwell, W.—Sheep shears.
1972	3*d.*	Jukes, R.—Puddling forges.
1973	7*d.*	Hogg, W. S.—Doors, gates, and shutters.
1974	3*d.*	De Clercq, R., and Chazelles, E.—Raising water, &c.
1975	11*d.*	Bovill, G. H.—Ships of war, &c.; manufacture of armour and other plates.
1976	1*s.* 2*d.*	Newton, A. V.—(*A communication from W. C. Hicks.*)—Sewing machines.
1977	10*d.*	Newton, A. V.—(*A communication from W. C. Hicks.*)—Single-thread sewing machines.
1978	3*d.*	Le Paige, L.—Treating fatty and oily matters.
1979	1*s.*	Kinsey, H.—Steam engines and boilers.
1980	7*d.*	Haycraft, G.—Powder flasks.
1981	7*d.*	Mott, A. J.—Apparatus foe drawing beer, &c. from casks.
1982	6*d.*	Moody, C. P.—Gates.
1983	7*d.*	Hemingway, J.—Machinery for working coal, ironstone, &c.
1984	3*d.*	Vassiviere, L.—Smoke-consuming apparatus.
1985	3*d.*	Griffin, J., and Griffin, C.—Cutting corks and bungs.
1986	3*d.*	Chatwin, H.—Card, needle, pin, and other cases, &c.
1987	10*d.*	Newton, A. V.—(*A communication from A. Howe.*)—Machinery for sewing.
1988	3*d.*	Lee, C., and Mace, T. K.—Backing raised or cut pile fabrics.
1989	6*d.*	Gray, J., Kershaw, T., Crowthier, B., and Dean, A.—Mules for spinning.
1990	6*d.*	Godwin, R. A.—Pumps.
1991	7*d.*	Falgas, A. F. B.—Trusses, bandages, and girdles.
1992	10*d.*	Birkbeck, G. H.—(*A communication from F. A. Chapelle, L. Caron, and A. Amiot.*)—Tents.
1993	4*d.*	Stocker, A. S., and Stocker, A. R.—Horse-shoes, boot heels, wheel tyres, &c.
1994	2*s.* 6*d.*	Wilde, H.—Electro-magnetic telegraphs, &c.
1995	9*d.*	Clarke, W. St. T.—Railway breaks.
1996	3*d.*	Schneider, T., and Crawley, C. E.—Inlaying.
1997	1*s.* 2*d.*	Barclay, A.—Cranes.
1998	1*s.*	Wigzell, M.—Twisting nails, &c.
1999	10*d.*	Wigzell, M.—Machinery for making twisted or spiral nails, &c.
2000	3*d.*	Greaves, H.—Water conveyance of coals, &c.
2001	9*d.*	Garzend, A.—Cutting up and reducing dye wood, &c.
2002	7*d.*	Gedge, W. E.—(*A communication from A. Tabutean.*)—Break for railway and other vehicles.
2003	3*d.*	Edwards, W., and Edwards, E.—Railway breaks.
2004	6*d.*	Salomons, A.—(*A communication from G. Higgins.*)—Bodice skirt.
2005	3*d.*	Iankowski, V.—Sawing wood, &c.
2006	3*d.*	Elvans, J. H.—Steel busk or stay fastening.
2007	3*d.*	Humpage, J.—Reaping and mowing machine.
2008	3*s.* 2*d.*	Horner, J. C.—(*A communication from F. May.*)—Looms for weaving.
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		1856.
1252*	4*d.*	De Normandy, A. R. Le M.—Obtaining fresh water from salt water.

*** Specifications will be forwarded by post on receipt of the amount of price and postage (the latter rarely exceeding One Penny). Sums exceeding 5*s.* must be remitted by Post Office Order, made payable at the Post Office, Holborn, to Mr. Bennet Woodcroft, Great Seal Patent Office.

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NUMBER of VISITORS for the Week ending 15th March, 1862, 3,595.

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All communications on the subject of the Museum to be addressed to the Superintendent,

B. WOODCROFT.

Great Seal Patent Office,
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STEAM ENGINES.

B. WOODCROFT.

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No. 857. FRIDAY, MARCH 21, 1862. Price 2d.

Applications for Letters Patent.

(*18th, 19th, and 20th March*, 1862.)

745. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improved means of arresting headstrong or runaway horses."—A communication from Augustin Durand (M. D.), a person resident at Bourg-la-Reine, (departement de la Seine,) in France.—Complete Specification. —Dated 18th March, 1862.

746. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "An improved combination of cooling and filtering apparatus, forming a safe for the preservation of solid and liquid provisions."—A communication to him from Joseph Weatherby Bartlett, a person resident at No. 419, Broadway, New York, in the United States of America.—Dated 18th March, 1862.

747. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "The application to the manufacture of paper pulps of a vegetable product not hitherto used for that purpose."—A communication from Frédéric Thierry Pitoy-Millot, a person resident at No. 12, Faubourg St. Pierre, Nancy (departement de la Meurthe), in France.—Dated 18th March, 1862.

748. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "An improved needle threading apparatus." — A communication from Jules Fouquet, a person resident at No. 18, Rue de Vaux, Vitry-le-François, (departement de la Marne,) in France.—Dated 18th March, 1862.

749. James Banks, of No. 19, Salisbury Street, Adelphi, Electric Engineer, for an invention of "Improvements in electro-magnetic telegraph printing apparatus or marking instruments, and the instruments or apparatus to be used in connection therewith."—Dated 18th March, 1862.

750. Henry Bailly, of 5, Salters Hall Court, Common Street, E. C., in the city of London, Merchant, for an invention of "Improvements in the manufacture of paper."—A communication to him from abroad by Ernest Autreux and Michels Joseph Cotton Brothers, Merchants, of La Rochelle, (departement Lower Charente), in France.—Dated 18th March, 1862.

751. Thomas Dunn, of the Windsor Bridge Iron Works, Pendleton, near the city of Manchester, Engineer, for an invention of "Improvements in the construction of bridges, roofs, houses, and other structures."—Dated 18th March, 1862.

752. William Tongue, of Bradford, in the county of York, Engineer, for an invention of "Improvements in machinery and in processes for preparing, heckling, dressing, and combing flax, hemp, silk, and other fibrous materials."—Dated 18th March, 1862.

753. Charles Iles, of Birmingham, in the county of Warwick, for an invention of "Improvements in the manufacture of umbrellas and parasols."—Dated 18th March, 1862.

754. André Alexandre Beaumont and Joseph Augustin Escalier, of 2, Rue Ste. Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention of "A flying top."—Dated 18th March, 1862.

755. James Archibald Jaques, Chemist, and John Americus Fanshawe, Engineer, both of Tottenham, in the county of Middlesex, and Frank Jaques, of Draylesdon, in the county of Lancaster, Gentleman, for an invention of "Improvements in the construction of elastic surface rollers."—Dated 18th March, 1862.

756. Joseph Anthony Ronketti, of 31, Northampton Road, Clerkenwell, in the county of Middlesex, Metcorological Instrument Maker, for an invention of "Improvements in meteorological instruments and thermometers." — Dated 18th March, 1862.

757. James Wright, of 42, Bridge Street, Blackfriars, city of London, Engineer, and Henry Wheatcroft, of 27, Fore Street, city of London, Manufacturer, for an invention of "Improvements in apparatus or machinery for lasting and making boots and shoes."—Dated 18th March, 1862.

758. Samuel Slack, of West Street, New Sneinton, in the parish of Sneinton, in the county of Nottingham, Lacemaker, for an invention of "Improvemcnts in the manufacture of stockings and other fabrics in circular knitting machines." —Dated 18th March, 1862.

759. Frederick Warner, of 8, Crescent, Cripplcgate, in the city of London, for an invention of "Improvements in cocks or taps."—Dated 18th March, 1862.

760. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the manufacture of barytes and barytic products, and the application of these substances in the manufacture of sugar and other uses."—A communication to him from abroad by Alfred Delaune, of Paris, France.—Dated 18th March, 1862.

761 John Turner Buck, of New North Road, in the county of Middlesex, Dressing Case Maker, for an invention of "Improvements in instruments and work cases known as 'Ladies' companions.'" —Dated 18th March, 1862.

762. Alfred Krupp, of Essen, in Rhenish Prussia, Cast Steel Manufacturer, for an invention of "Certain improvements in the method of manufacturing shafts for steam boats and other purposes." —Dated 19th March, 1862.

763. Robert Hadfield and Jabez Shipman, both of Attercliffe, in the borough of Sheffield, and county of York, Wire Drawers and Manufacturers, for an invention of "Improvements in hardening and tempering wire and crinoline steel."—Dated 19th March, 1862.

764. Spendlove Desborough, of Noble Street, St. Martin's le Grand, in the city of London, Manufacturer, for an invention of "Improvements in the manufacture or construction of sewing or other needles."—Dated 19th March, 1862.

765. Robert Wilson, of Patricroft, ncar the city of Manchester, Engineer, for an invention of "Improvements in hydraulic presses, and in machinery or apparatus for raising or forcing fluids."—Dated 19th March, 1862.

766. Sampson Moore, of Liverpool, in the county of Lancaster, Millwright, Engineer, and Iron Founder, for an invention of "Certain improvemcnts in maehinery for compressing and cutting tobacco."—Dated 19th March, 1862.

767. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in printing and painting upon glass and ceramic wares and upon metallie and mineral substances, also in the preparation of inks and eolours for printing and painting."—A communication to him from abroad by Charles Raphaël Maréchal and Cyprien Marie Tessié du Motay, of Paris, France.—Dated 19th March, 1862.

768. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in reproducing or in producing copies of guipure lace, embroidery, and other likc articles."— A communication to him from abroad by Rosalie Clémentine Tillard, of Paris, France.—Dated 19th March, 1862.

769. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in rotary engines."—A communication to him from abroad by Serkis Ballian of Constantinople, Turkey.— Dated 19th March, 1862.

770. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatuses for drawing in and paying out chain cables, applicable to windlasses and eapstans."—A communication to him from abroad by Jean Salette, of Marseillcs, France.—Dated 19th March, 1862.

771. John Cumming, of Edinburgh, Artist, for an invention of "Improvements in the method of and apparatus for distributing and setting up type."—Dated 19th March, 1862.

772. George Meek Todd, of No. 84, Hackney Road, in the county of Middlesex, for an invention of "The improvement of the sewing machine in such a manner that it shall form a new stitch, which he entitles the 'Tie-knot stitch.'"—Dated 19th March, 1862.

773. Bernard Samuelson, of Banbury, in the county of Oxford, Agricultural Engineer, for an invention of "Improvements in chain harrows."— Dated 20th March, 1862.

774. John George Truscott Campbell, of No. 1, Hatcham Terrace, Old Kent Road, in the county of Surrey, Clerk, for an invention of "Certain improvements in ships' propellers."--Dated 20th March, 1862.

775. Albert Hill, of Cheddar, in the county of Somerset, Stay Manvfacturer, for an invention of "An improvcd fastening for stays."—Dated 20th March, 1862.

776. Robert Martin Roberts, of Kensington, in the county of Middlesex, Mining Engineer, for an invention of "Improvements in obtaining and applying motive power." — Dated 20th March, 1862.

777. Edwin Smith, of Sheffield, in the county of York, Sculptor, for an invention of "Improvements in means or apparatus for cutting stone, wood, and other material, which improvements are also applicable to modelling in plastic material." —Dated 20th March, 1862.

778. Edward Field, of Buckingham Street, Adelphi, in the city of Westminster, and county of Middlesex, Consulting Engineer, for an invention of "Improvcmcnts in regulating the flow of gaseous and other fluids."—Dated 20th March, 1862.

779. William Baddeley, of Angel Terrace, Islington, in the county of Middlesex, Civil Engineer and Patent Agent, for an invention of "An improved method of preparing tobacco for smoking, and in the apparatus to be used for that purpose." —A communication to him from abroad by Charles Hoppe, of Cologne, in Germany.—Dated 20th March, 1862.

780. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the manufacture of soap."—A communication to him from abroad by Mr. Antoine Auguste Mollard, of 29, Boulevart St. Martin, Paris, Merchant.—Dated 20th March, 1862.

781. John George Thompson, of Madras, in the East Indies, now residing at Porchester Place, in the county of Middlesex, Gentleman, for an invention of "Improvements in pianofortes, organs, harmoniums, and other instruments having key boards."—Dated 20th March, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2881. To James Grint, of 45, Harrison Street Gray's Inn Road, in the county of Middlesex, Engineer and Draughtsman, for the invention of "Improvements in pegs, nails, or like fastenings, for uniting the soles of boots and shoes, and other substances."

On his petition, recorded in the Office of the Commissioners on the 16th day of November, 1861.

2890. To James Moore Clements, of Birmingham, in the county of Warwick, Tailor and Draper, for the invention of "Improvements in the making or manufacturing of certain parts of garments for either sex, likewise in the manner of preparing the same for sale, as also an improved button to be attached to garments without sewing."

On his petition, recorded in the Office of the Commissioners on the 18th day of November, 1861.

202. To John Brown, Manager, and Joseph Davenport, Pattern Maker, both of Bolton, in the county of Lancaster, for the invention of "An improved lubricating apparatus applicable to pistons."

On their petition, recorded in the Office of the Commissioners on the 25th day of January, 1862.

264. To Edward Henry Cradock Monckton, of Fineshade, in the county of Northampton, Esquire, for the invention of "Improvements in the application of electricity for obtaining ammonia, and other useful products, during the combustion of coal and fuel, and in the apparatus employed therein."

On his petition, recorded in the Office of the Commissioners on the 31st day of January, 1862.

364. To Godfrey Joachim Aman, of Liverpool, in the county of Lancaster, Merchant, for the invention of "Improvements in envelopes or bags to hold grain, or similar substances, for transmission by post or as parcels."

On his petition, recorded in the Office of the Commissioners on the 12th day of February, 1862.

468. To Spencer Smith, of No. 204, High Holborn, in the county of Middlesex, Engineer, for the invention of "Improvements in electro-magnetic engines for obtaining and applying motive power."

On his petition, recorded in the Office of the Commissioners on the 21st day of February, 1862.

482. To Robert Foster, the younger, of Beeston, in the county of Nottingham, Horticultural Builder, for the invention of "Improvements in the construction of horticultural and other similar buildings or erections."

On his petition, recorded in the Office of the Commissioners on the 22nd day of February, 1862.

572. To Robert Shaw, junr., of Portlaw, in the county of Waterford, Ireland, Cotton Spinner, for the invention of "An improvement in fire-arms by a more convenient method of placing the ram rod in position."

On his petition, recorded in the Office of the Commissioners on the 3rd day of March, 1862.

598. To William Hensman, of Woburn, in the county of Bedfordshire, and William Hensman, the younger, of Linslade, in the county of Buckinghamshire, Agricultural Engineers, for the invention of "Improvements in steam ploughs, and in apparatus connected therewith."

On their petition, recorded in the Office of the Commissioners on the 5th day of March, 1862.

608. To Marcus Bourne Newton, of Wharf No. 4, Inside Great Northern Goods Station, King's Cross, N., London, for the invention for "Improvements in the manufacture and construction of junction and other drain pipes in clay or other plastic materials."

610. To Joseph Revell, of Dukinfield, in the county of Chester, Master Plasterer and Decorator, for the invention of "Improvements in securing the rails of railways and tram ways to the chairs."

612. To John Fowler, junior, David Greig, and Richard Noddings, of Leeds, in the county of York, for the invention of "Improvements in apparatus for cultivating or tilling land."

614. To Richard Wright, of 18, Albany Road, Camberwell, in the county of Surrey, for the invention of "Improvements in heating and clarifying saccharine fluids."

618. And to Henry Bentinck Coathupe, of the Junior United Service Club, Saint James's, in the county of Middlesex, Esquire, for the invention of "Improvements in the manufacture of clips, hooks, and other such like fastenings."

On their several petitions, recorded in the Office of the Commissioners on the 7th day of March, 1862.

620. To Henry Fletcher, of 82, Wood Street, Cheapside, in the city of London, Warehouseman, for the invention of "An improved clip for securing the steel or other expanders of crinolines to the suspenders thereof."

622. To Andrew Blair, of the Dawsholm Print Works, in the county of Dumbarton, North Britain, Calico Printer, for the invention of "Improvements in rotatory engines."

624. To Sidney Samuel Bromhead, of Bristol, in the county of Gloucester, Ironmonger, for the invention of "Improvements in the construction of boxes or receptacles for coals."

626. To John Deane, junior, of King William Street, in the city of London, Gun Manufacturer, for the invention of "Improvements in revolving fire-arms."

628. To Pierre Joseph Guyet, of Paris, in the empire of France, Civil Engineer, for the invention of "Improvements in water meters."

630. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in brims and peaks of hats, caps, and other coverings for the head."—A communication to him from abroad by Mr. Jonas Haas, of 29, Boulevart St. Martin, Paris, Hat Manufacturer.

632. To John Fleming, of Mincing Lane, in the city of London, for the invention of "Improvements in machinery for pressing cotton."—A communication to him from abroad by Alexander Johnstone, a person resident at Bombay, in the East Indies.

634. To Luke Richards Sykes, of New Coventry Street, in the county of Middlesex, for the invention of "Improvements in gloves."

636. And to John James Henry Gebhardt, of Lawrence Lane, in the city of London, Merchant, for the invention of "An improved fastening for albums and other books, bags, reticules, and other articles."—A communication to him from abroad, by Herr Kugler, of Nuremberg in Germany, Manufacturer.

On their several petitions, recorded in the Office of the Commissioners on the 8th day of March, 1862.

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638. To James Duncan, of Greenock, in the county of Renfrew, North Britain, Sugar Refiner, for the invention of "Improvements in the manufacture of vinegar."

640. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in producing by the aid of photography copies of maps, charts, plans, and drawings."—A communication to him from abroad by Arthur Guy Morvan, of Paris, France.

642. To William Spence, of 50, Chancery Lane, in the county of Middlesex, Patent Agent, for the invention of "Improvements in projectiles."—A communication to him from abroad by Ira Wells Shaler, of Brooklyn, in the county of Kings and state of New York, United States.

644. To Alexander Charles MacLeod, of Hanover Square, in the county of Middlesex, Doctor of Medicine, for the invention of "Improvements in ventilating hats and coverings for the head."

646. To Andrew Barclay, of Kilmarnock, in the county of Ayr, North Britain, Engineer, for the invention of "Improvements in traction engines, and in apparatus for indicating the pressure of steam."

650. And to Henry Herman Kromschroeder, of 32, Princess Terrace, Regent's Park, in the county of Middlesex, for the invention of "Improvements in gas meters."

On their several petitions, recorded in the Office of the Commissioners on the 10th day of March, 1862.

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654. To William Barter, of Brixham, in the county of Devon, Master Mariner, for the invention of "Improvements in apparatus for propelling vessels, and for enabling them to work off lee shores during storms."

658. To Collinson Hall, of Navestock, in the county of Essex, Agriculturalist, for the invention of "Improvements in implements for breaking up the soil, and in ropes and drums to be employed in the cultivation of the soil by steam."

662. And to George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for the invention of "Improvements in attaching artificial teeth to plates and to each other, and in moulds for forming artificial teeth."—A communication to him from abroad by Abraham Merritt Asay, and Jacob Lambert Asay, both of the city of Philadelphia, Pennsylvania, in the United States of America."

On their several petitions, recorded in the Office of the Commissioners on the 11th day of March, 1862.

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668. To William Henry Latham, of Bolton, in the county of Lancaster, Foreman, and Frederick Cartwright Ward Latham, of the same place, Printer, for the invention of "Certain improvements in machinery or apparatus for cutting paper, pasteboard, and other similar substances."

670. To John Johnson, of Heaton Norris, in the county of Lancaster, and Samuel Morris, of Stockport, in the county of Chester, for the invention of "Improvements in steam boilers."

672. To Echlin Molyneux, junior, of Seaview, Enniskerry, in the county of Wicklow, Ireland, for the invention of "An improved method of utilizing the waste heat of the products of combustion as they escape from a furnace, and securing a more complete combustion of the fuel."

674. And to Arthur Martin A'Beckett, of Surbiton, in the county of Surrey, F.R.C.S., for the invention of "Improvements in railway signal apparatus."

On their several petitions, recorded in the Office of the Commissioners on the 12th day of March, 1862.

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680. To James Saul Hendy, of Essex Street, Strand, in the county of Middlesex, Butler to the Honourable Society of the Inner Temple, for the invention of "An improvement in the construction of chimneys and chimney pots."

684. To John Hunter, Manager of the Dalmellington Iron Works, in the county of Ayr, North Britain, for the invention of "Improvements in apparatus for removing slag from furnaces."

686. To Henry Fletcher, Engraver and Mechanician, of Market Street, Manchester, in the county of Lancaster, for the invention of "Improvements in cleaning and preparing cotton, and the machinery used for that purpose."

690. To Séverin Virgile Bonneterre, Charles Théodore Erhart, and Jules Ferdinand Monti, all of 51, Rue de Malte, Paris, in the empire of France, for the invention of "An improved apparatus for regulating the pressure of steam in steam boilers and the combustion in their furnaces."

694. To Samuel Kearsley Thompson, of Coniston, in the county of Lancaster, Engineer, and Arthur Thomas Thompson, of Bolton-le-Moors, in the county of Lancaster, Engineer, and Samuel Mawson, of Bolton-le-Moors, in the county of Lancaster, Surgeon Dentist, for the invention of "Improvements in railway apparatuses for communicating between guard and driver, and for coupling and uncoupling the carriages, parts of which apparatuses are applicable to connecting pipes and tubes."

696. To Henry Fletcher, of 82, Wood Street, Cheapside, in the city of London, Warehouseman, for the invention of "Improvements in neck ties, scarfs, cravats, and collars."

698. And to Edward Bolton, of Warrington, in the county of Lancaster, Glass Manufacturer, for the invention of "Improved apparatus for transferring liquid matters from one vessel to another."

On their several petitions, recorded in the Office of the Commissioners on the 13th day of March, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given, that the petition of

745. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, praying for Letters Patent for the invention of "A new or improved means of arresting headstrong or runaway horses,"—a communication from Augustin Durand (M.D.), a person resident at Bourg-la-Reine (dept. de la Seine), in France, —was deposited and recorded in the Office of the Commissioners on the 18th day of March, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Notice of Application for Prolongation.

In the matter of certain Letters Patent granted to John Davie Morries Stirling, of Black Grange in the county of Clackmannan, for "Improvements in the manufacture of iron and metallic compounds."

Notice is hereby given, that George Auldjo Jamieson, of 24, St. Andrew's Square, in the city of Edinburgh, Chartered Accountant, (the trustee of the sequestrated estate of John Davie Morries Stirling, late of Black Grange, in the county of Clackmannan, deceased,) and John Edward Errington, of 6, Pall Mall East, Westminster, Esquire, and George Robinson, of Farm House, near Skipton, in the county of York, Gentleman, (executors of Alfred Stanistreet Jee, assignee of part of the said Letters Patent,) intend to apply by petition, under the 4th section of the statute 5 & 6 William IV., chapter 83, and the 2nd section of the statute 7 & 8 Victoria, c. 69, to Her Majesty in Council, for a prolongation of the term of Letters Patent for an "Invention of improvements in the manufacture of iron and metallic compounds," granted to the said John Davie Morries Stirling, and sealed at Edinburgh on the 2nd day of October, in the 12th year of the reign of Her present Majesty Queen Victoria, and also of Letters Patent for the said "Invention of improvements in the manufacture of iron and metallic compounds," granted to the said John Davie Morries Stirling, and sealed at Westminster the 12th day of October in the 12th year of the reign of Her present Majesty Queen Victoria.

And notice is hereby given, that Application will be made by counsel to the Judicial Committee of the Privy Council on the 1st day of May now next, (or, if the said Judicial Committee shall not sit on that day, at the then next sitting of the said Judicial Committee,) for a time to be fixed for hearing the matter of the said petition, and that on or before the said 1st day of May next notice must be given of any opposition intended to be made to the said petition, and any person intending to oppose the said Application must lodge a caveat against the granting of such Application at the Council Office, on or before that day.—Dated this 17th day of March 1862.

Miller and Smith.
6, Chatham Place, Blackfriars, London,
Solicitors for the above-named George Auldjo Jamieson, John Edward Errington, and George Robinson.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

21st March.

2136. Jean Baptiste Fondu, of Lodelinsart, in the kingdom of Belgium, Civil Engineer, for an invention of "Improvements in the construction of fire-grates for steam and other boilers, and suitable to all kinds of fires."—Dated 27th August, 1861.

2371. Hippolyte Plantrou, junr., of No. 15, Passage des Petites Ecuries, Paris, in the empire of France, Dyer, for an invention of "Improvements in washing and scouring wools by the introduction of air into the water, using an aëriform washing apparatus."—Dated 23rd September, 1861.

2382. Thomas Davey, of Tucking Mill, Camborne, in the county of Cornwall, Manufacturer, for an invention of "Improvements in the manufacture

of safety fuses, parts of which are applicable to the manufacture of pipes and tubes of lead and other soft metal, gutta percha, caoutchouc, bitumen, and earthenware."—Dated 24th September, 1861.

2383. CHARLES WATT, of Graham Street, Walworth, Surrey, Chemist, JOHN WATT, of Lorrimore Street, Walworth, Chemist, and THOMAS SNAITH HAVISIDE, of Cornhill, in the city of London, Gentleman, for an invention of "An improved mode or method of bleaching palm oil."—Dated 24th September, 1861.

2384. JAMES FAWCETT, of Wakefield, in the county of York, Corn and Fulling Miller, for an invention of "An improved material particularly adapted for the scouring, cleansing and fulling of woollen or other cloths."—Dated 24th September, 1861.

2392. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatuses for letting off water from and for admitting oil or other lubricating matter into steam cylinders."—A communication to him from abroad by Isidore Duballe, of Paris, France.—Dated 25th September, 1861.

2400. THOMAS BENTLEY, of Margate, in the county of Kent, Ironmonger, for an invention of "Improvements in apparatus for beating eggs and for mixing or agitating other fluids, compounds, or matters."—Dated 26th September, 1861.

2402. JAMES OPENSHAW, Manufacturer, WILLIAM ENTWISTLE, Manager, and JAMES LORD, Mechanic, all of Bury, in the county of Lancaster, for an invention of "Certain improvements in 'mules' for spinning cotton and other fibrous substances."—Dated 26th September, 1861.

2405. SAMUEL SINCLAIR ROBSON, of Sunderland, in the county of Durham, for an invention of "Improvements in machinery or apparatus for raising or lowering heavy bodies."—Dated 26th September, 1861.

2410. VICTOR SOSTHÈNE LÉTÉ, of Paris, France, Gentleman, for an invention of "Improvements in aërated or sparkling white wines."—Dated 26th Septembea, 1861.

2412. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the manufacture of peat."—A communication to him from abroad by Auguste Mareelin Manrique Comte de Lara et du Ren, Engineer, of 29, Boulevart St. Martin, Paris.—Dated 26th September, 1861.

2417. DUNCAN MCCALLUM, of Greenock, in the county of Renfrew, North Britain, Engineer, for an invention of "Improved arrangements for filling and closing bottles and other vessels."—Dated 27th September, 1861.

2426. DENNY LANE, of the county of the city of Cork, Secretary of the Cork Gas Consumers' Company, for an invention of "Improvements in apparatus whereby to regulate the passage or flow of gas, water, and other fluids."—Dated 28th September, 1861.

2429. MEINRAD THEILER, of Einsiedeln, in the republic of Switzerland, Engineer, for an invention of "Improvements in telegraphs."—Dated 28th September, 1861.

2435. JOSEPH LUSH, of St. George's Square, Portsea, in the county of Hants, Brewer, for an invention of "Improvements in mashing attemperators."—Dated 30th September, 1861.

2448. WILLIAM HENRY PAYN, of Dover, in the county of Kent, Solicitor, for an invention of "Improvements in apparatus for preventing the loss of and facilitating the recovery of ships' moorings and submerged property in general."—A communication to him from abroad by Elton Templemore, of Madras, India, Civil Engineer.—Dated 1st October, 1861.

2449. WILLIAM STRATFORD HOGG, of Rotherhithe Wall, Rotherhithe, in the county of Surrey, Ironmonger, for an invention of "Improvements in rendering columns, girders, doors, shutters, and other parts of buildings fireproof."—Dated 1st October, 1861.

2463. JOHN CHARLES DICKINSON, of Blackburn, in the county of Lancaster, Machine Maker, for an invention of "Certain improvements in steam engines."—Dated 3rd October, 1861.

2476. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention of "Improvements in the permanent way of railways."—A communication to him from abroad by Laurent Rigolier, of Lyons, in the empire of France.—Dated 4th October, 1861.

2497. WILLIAM SQUIRE, of Upper Montague Street, Bryanstone Square, in the county of Middlesex, Piano-forte Maker, for an invention of "Improved machinery for planing and shaping wood."—Dated 5th October, 1861.

2542. THOMAS BUTTERWORTH COLLINGWOOD, Manager, and ABRAHAM BUTTERWORTH, Overlooker, both of Rochdale, in the county of Lancaster, for an invention of "Improvements in throstle and doubling frames for spinning and doubling fibrous materials."—Dated 11th October, 1861.

24. EDWARD NUGENT, of Brooklyn, in the county of Kings, and state of New York, United States of America, for an invention of "Improvements in fire-arms."—Dated 3rd January, 1862.

80. WILLIAM CLARK, of No. 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in apparatus for generating and applying steam as a motive power."—A communication to him from abroad by Mr. Louis Arnier, of 29, Boulevart St. Martin, Paris, in the empire of France, Mechanician.—Dated 10th January, 1862.

132. THOMAS NEWTON, of the city of Manchester, in the county of Lancaster, Gun and Rifle Manufacturer, for an invention of "Improvements in sights for rifles."—Dated 18th January, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 19th March, 1862, inclusive.*)

17th March.

691. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "An improvement in the manufacture of cast steel."—Dated 18th March, 1859.

692. Albert Louis Thirion, Pastor, of Asche-en-Refail, province de Namur, kingdom of Belgium, for an invention of "Improvements in water, wind, steam, and hand mills."—Dated 18th March, 1859.

703. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "An improvement or improvements in the manufacture of cast steel."—Dated 19th March, 1859.

704. William and Samuel Pickstone, of Radcliff Bridge, near Manchester, Cotton Spinners, Manufacturers, and Dyers, for an invention of "An improvement in stiffening, sizing, filling, or weighting textile fabrics."—Dated 19th March, 1859.

18th March.

702. James Howden and Alexander Morton, of Glasgow, in the county of Lanark, North Britain, Engineers, for an invention of "Improvements in apparatus for obtaining and regulating motive power."—Dated 19th March, 1859.

712. Joseph Roberts, of Staley Bridge, in the county of Chester, Engineer, for an invention of "Improvements in packings for pistons."—Dated 21st March, 1859.

713. Sigismond Leoni, of Saint Paul Street, in the county of Middlesex, Manufacturer, for an invention of "Improvements in the manufacture of useful and ornamental articles, surfaces, and works, parts of articles, and parts of machinery or appartus from talc and other silicates of magnesia, and from the same combined with other substances."—Dated 21st March, 1859.

19th March.

707. William Haggett, of Sherborne, in the county of Dorset, Architect and Surveyor, for an invention of "An improved method of treating metals and other materials to increase their strength."—Dated 21st March, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

18th March, 1862.

625. Benjamin O'Neale Stratford, Earl of Aldborough, of Stratford Lodge, in the county of Wicklow, in Ireland, for an invention of "Improvements in aërial navigation, and in the application of the same to warlike purposes."—Dated 20th March, 1855.

Erratum in Journal of 18th March, 1862.

After 2816, for "2819" read "2817."

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March ,,
268	,, April to June ,,
291	,, July to September ,,
321	,, October to December ,,
345	A.D. 1854—January to March ,,
371	,, April to June ,,
399	,, July to September ,,
424	,, October to December ,,
451	A.D. 1855—January to March ,,
475	,, April to June ,,
505	,, July to September ,,
527	,, October to December ,,
553	A.D. 1856—January to March ,,
579	,, April to June ,,
605	,, July to September ,,
632	,, October to December ,,
660	A.D. 1857—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1858—January to March ,,
789	,, April to June ,,
815	,, July to September ,,
842	,, October to December ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632	A.D. 1852—October to December inclusive
660	A.D. 1853—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1854—January to March ,,
789	,, April to June ,,
815	,, July to September ,,
842	,, October to December ,,

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FOREIGN PATENTS.



FRANCE.

CURRENT LIST of PATENTS of Invention and Certificates of Addition.

1861.

(*Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.*)

NOTE.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

51,453. CHAUVIN, of 78, Rue du Temple, Paris, for "An igniting apparatus for smokers."—Dated 8th October, 1861.

51,454. CORBAZ, of 80, Rue de Sèze, Lyons, for "An apparatus for the manufacture of chenille."—Dated 24th October, 1861.

51,455. CORNEILLE, of Trans, for "A machine for beating cocoons."—Dated 28th October, 1861.

51,456. DANIEL, of 6, Rue de Nantes, Rennes, for "Carbonization of calcareous sand."—Dated 24th October, 1861.

51,457. DELORMAS and FERREL, of 1, Rue des Remparts-d'Ainay, Lyons, for "So-called 'Economical steam cylinders.'"—Dated 23rd October, 1861.

51,458. DESMAREST, of 10, Rue Urvoy de Saint Bédan, Nantes, for "An instrument for blacking foot coverings and greasing edge tools without dirtying one's hands and without danger of cutting one's self."—Dated 22nd October, 1861.

51,459. DESNOS-GARDISSAL, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in baskets or apparatus for conveying or ranging full or empty bottles."—Dated 7th October, 1861.

51,460. DESNOS-GARDISSAL, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Electric apparatus for promoting the safety of railway trains."—Dated 7th October, 1861.

51,461. DUFOURNEL, of Renaucourt, for "Applying electricity to refining cast iron to be converted into iron or steel."—Dated 26th October, 1861.

51,462. FRADIN, of Largeasse, for "An apparatus with a centrifugal force for regulating millstones of windmills."—Dated 24th October, 1861.

51,463 GOGHT, represented by Bresson, of 51, Rue de Malte, Paris, for "A buffet stove heated by means of gas or alcohol."—Dated 8th October, 1861.

51,464. GUINIER, of 23, Rue de Grenelle, Saint Honoré, Paris, for "Improvements in apparatus for separating and deodorizing fecal matter."—Dated 8th October, 1861.

51,465. LEJEUNE, domiciled with Sinoquet, of 3, Rue Lemire, Rouen, for "A differential drawing machine with a regulator applicable to mules for spinning wool."—Dated 24th October, 1861.

51,466. MEYER and Comp., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "An improved steam engine with a refrigeratory escape valve."—Dated 7th October, 1861.

51,467. MEYER and Company, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in mills for the manufacture of cane sugar."—Dated 7th October, 1861.

51,468. PAVY, domiciled at 122, Rue de Rivoli, Paris, for "Manufacture of paper and pasteboard."—Dated 7th October, 1861.

51,469. PELLEGRIN, of Quartier St. Pierre, Marseille, for "A self-acting railway-break."—Dated 24th October, 1861.

51,470. PEYRET, of 20, Rue de la Bourse, St. Etienne, for "Means of dividing a piece of stuff so as to obtain ribbons with selvedges that do not unravel."—Dated 24th October, 1861.

51,471, PIGUET, of 9, Place St. Pierre, Besançon, for "A counter of public carriages."—Dated 24th October, 1861.

51,472. PRAXEL, jun., of Roubaix, for "A pecker-guard for weaving machines."—Dated 28th October, 1861.

51,473. RASSELET, of Billy-sur-Ourcq, for "A jointed harrow."—Dated 23rd October, 1861.

51,474. RÉMOND, of Peronne, for "A bridle and bit."—Dated 22nd October, 1861.

51,475. ROYNEL, of Fresne-Poret, for "A cobbler's lamp."—Dated 19th October, 1861.

51,476. SAGNES, of 2, Rue Fabrèque, Toulon, for "A mode of closing powder chests."—Dated 28th October, 1861.

51,477. SAUVARD, of Jargeau, for "A wine press."—Dated 21st October, 1861.

51,478. TAVERNIER, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in apparatus for suspending lamps, gas-burners, &c."—Dated 8th October, 1861.

51,479. TOUZALLIN, Father, of Fontenay-aux-Roses, for "A motor."—Dated 8th October, 1861.

51,480. TWIGG, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in busks of stays."—Dated 8th October, 1861.

51,481. VANDEREYKEN, of 2, Rue de Choiseul, Paris, for "Applying the feathers of geese and swans to ladies' bonnets."—Dated 8th October, 1861.

15,482. AGUDIO, represented by Brade, of 15, Rue Neuve Ménilmontant, Paris, for "A funicular locomotive for ascending considerable gradients on railways."—Dated 10th October. 1861.

* For the French Patent Law see No. 228 of this Journal.

51,483. ARRIGHETTY, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A portable air spit."—Dated 9th October, 1861.

51,484. BOURDIAU, represented by Besses, of 92, Boulevart de Sebastopol, Paris, for "Cushions and strings for wooden shoes."—Dated 9th October, 1861.

51,485. BOUTON, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "A closing box, and slide bars without pressure for locomotive and other engines."—Dated 10th October, 1861.

51,486. BRUÈRE, of Freteval, for "Improvements in cast iron frames of roofs."—Dated 18th October, 1861.

51,487. BUISSON, of Tullins, for "A system of mills."—Dated 10th October, 1861.

51,488. CHARLES, of 10 and 12, Rue de Bièvre, Paris, for "A cylindrical apparatus for heating baths."—Dated 10th October, 1861.

51,489. CLARK, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machines and processes for shaping and manufacturing certain articles of paper work."—Dated 9th October, 1861.—(English Patent, 8th April, 1861.)

51,490. COURTOIS, of Eurville, for "Preserving vines from frost."—Dated 23rd October, 1861.

51,491. COUVREUX, of Bazeilles, for "A rotary apparatus for scouring or pickling metals."—Dated 23rd October, 1861.

51,492. COUVREUX, of Bazeilles, for "A raising apparatus with a rotary crab."—Dated 23rd October, 1861.

51,493. DAGASSAN, of 29, Rue de la Taupe, Bordeaux, for "A box for keeping tooth powder."—Dated 23rd October, 1861.

51,494. DALOZ, of 33, Rue de la Citè, Troyes, for "A kepi or military cap with adhesive lining."—Dated 23rd October, 1861.

51,495. DUCRET, of Thônes, for "A lithographic press."—Dated 23rd October, 1861.

51,496. GALY-CAZALAT and RICHARD, of Angoulême, for "A so-called 'Pyromanometer or calorimeter.'"—Dated 19th October, 1861.

51,497. GILLE, of 40, Rue Croix-des-Petits-Champs, Paris, for "A kind of feather fur."—Dated 9th October, 1861.

51,498. GUÉRARD, of Courtemanche, for "An hydraulic wheel with clack-valves, and with an interior feeder of water."—Dated 22nd October, 1861.

51,499. HENON, of Nouzon, for "Preparing iron racks and mode of shaping said racks."—Dated 21st October, 1861.

51,500. JACQUOT, of 1, Rue de la Muette, Paris, for "A system of pumps."—Dated 10th October, 1861.

51,501. LANDMANN, of Ste.-Croix, Algiers, for "An hydraulic engine."—Dated 12th October, 1861.

51,502. LEMOINE-BRABANT, of 3, Rue du Levant, Reims, for "A mechanical mode of sizing."—Dated 23rd October, 1861.

51,503. LEONARD, ANDRIES-LAMBERT, and PIVON, represented by the former, of 14, Rue du Tournai, Lille, for "A glass melting furnace with moveable grates."—Dated 23rd October, 1861.

51,504. MICHAUX, represented by Girard, of 96, Rue de Bondy, Paris, for "A kind of pins for head-dresses."—Dated 10th October, 1861.

51,505. MISSAQUE, of 11 and 22, Rue Mazagran, Paris, for "Bellows for destroying insects."—Dated 16th February, 1861.

51,506. MOLL, of 1, Place du Parlement, Bordeaux, for "Cast-iron chairs with peculiar iron wedges for preventing rails from gliding."—Dated 23rd October, 1861.

51,507. PERSON and DEKEYSER, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A substance for the manufacture of paper, pasteboard, &c., and of tissues and ropes of all kinds."—Dated 9th October, 1861.

51,508. PORTALIER, of St. Malo, for "An apparatus for removing cartridges."—Dated 18th October, 1861.

51,509. PRAXEL, of Guise, for "A counter for indicating and registering the movement of a carriage, or of any machine."—Dated 22nd October, 1861.

51,510. QUINARD, of Revin, for "A machine for the manufacture of horse-shoes."—Dated 22nd October, 1861.

51,511. SERIS, of Dax, for "Means or stoves for protecting railway travellers from dust."—Dated 22nd October, 1861.

50,512. TOURNIER, Brothers, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A system of wheel-tyres."—Dated 10th October, 1861.

51,513. ALBARET and Company, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in locomotive engines."—Dated 12th October, 1861.

51,514. BERTHEMAIT, of 107, Rue de Montreuil, Paris, for "Brick-mouldings for bottle stands."—Dated 12th October, 1861.

51,515. BOGNARD, jun., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A process for transferring chromo-lithographic impressions, especially on skin and other substances."—Dated 11th October, 1861.

51,516. BOISSE, of Rodez, for "Apparatus and metallurgical operations for separating certain mineral substances, and applying said operations and apparatus to the treatment of metallic ores, and to purifying certain minerals that are more or less subject to the action of acids, and especially sulphate of baryta."—Dated 28th October, 1861.

51,517. CALCOTT, represented by Castelbon, of 15, Passage des Petites-Ecuries, Paris, for "Improvements in means and apparatus for producing stage effects."—Dated 7th October, 1861.

51,518. CASSELA, represented by Ricordeau, of 33, Boulevart de Strasbourg, Paris, for "Improvements in thermometers of mercury."—Dated 11th October, 1861.

51,519. CHURCH, represented by Brade, of 29, Rue Ste. Anne, Paris, for "A rest or stand of pianos

and other similar musical instruments."—Dated 29th August, 1861.—(English Patent, 22nd Januar , 1861.)

51,520. Dudon-Mahon, of Soissons, for "An hydrostatic pump."—Dated 30th October, 1861.

51,521. Eichhorn, represented by Bœhler, of 24, Rue Buffault, Paris, for "A special machine for the conglomeration of small peat and coal."—Dated 11th October, 1861.—(Bavarian Patent, 10th March, 1860.)

51,522. Gray, represented by Tolhausen, of 35, Boulevart Bonne-Nouvelle, Paris, for "Improvements in apparatus for melting, purifying, and discharging oleaginous and fat substances."—Dated 11th October, 1861.

51,523. Grosrenaud and Valserres, represented by Estachy, of 10, Avenue d'Enfer, Paris, for "A mordant for dyeing."—Dated 11th October, 1861.

51,524. Guillemont and Heu, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A capillary diving lamp for schist lights, &c."—Dated 10th October, 1861.

51,525. Guilmet, represented by Guion, of 29, Boulevart St. Martin, Paris, for "An apparatus for regulating clocks."—Dated 10th October, 1861.

51,526. Héron, of 6, Rue du Cloître-Saint-Merri, Paris, for "A process for unheading and gutting fish and removing their bones without opening them."—Dated 11th October, 1861.

51,527. Japy, Brothers and Company, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in watches."—Dated 12th October, 1861.

51,528. Joubert, of 219, Rue du Temple, Paris, for "Improvements in moveable frames of albums, books, &c."—Dated 12th October, 1861.

51,529. Klusemann, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machines for washing animal black."—Dated 12th October, 1861.

51,530. Lancelott, represented by Castelbon, of 15, Passage des Petites-Ecuries, Paris, for "Improvements in an apparatus for the manufacture of chains of foils or plated metal."—Dated 11th October, 1861.

51,531. Laporte, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A process for obtaining relievo photographs."—Dated 10th October, 1861.

51,532. Merlue and Albert, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "An improved top."—Dated 12th October, 1861.

51,533. Monti and Erhart, represented by Bresson, of 51, Rue de Malte, Paris, for "An apparatus for regulating the pressure of steam by the damper of the fire-place."—Dated 12th October, 1861.

51,534. Murat, of 64, Route Militaire de Charonne, Paris, for "A trigonometric apparatus for measuring at once great distances without the use of tables of logarithms." — Dated 11th October, 1861.

51,535. Rasetti, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "So-called 'Unalterable chocolate.' " — Dated 11th October, 1861.

51,536. Rivett, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machines for carding cotton and other similar substances."—Dated 12th October, 1861.—(English Patent, 12th April, 1861.)

51,537. Rougier, of Périgueux, for "A key stop applicable to Lefaucheux' guns."—Dated 26th October, 1861.

51,538. Sayou and Fournier, of Toulon, for "A system of hydraulic wheels."—Dated 31st October, 1861.

51,539. Schalkenbach, domiciled with Grisza, of 61, Rue Bourbon, Villeneuve, Paris, for "A musical instrument."—Dated 12th October, 1861.

51,540. Stevens, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kneading machine with a feeder."—Dated 12th October, 1861.—(English Patent, 15th January, 1861.)

51,541. Symon, represented by Bresson, of 51, Rue de Malte, Paris, for "Improvements in the manufacture of nails for ornamenting small pieces of furniture and other fancy articles."—Dated 12th October, 1861.

51,542. Taylor and Edkins, represented by Cobbé, of 8, Rue Malar, Paris, for "Improvements in belts or ladies' pages, being also applicable to hangings or other objects."—Dated 11th October, 1861.

51,543. Watkins, represented by Cobbé, of 8, Rue Malar, Paris, for "Improvements in axles and axle-boxes."—Dated 11th October, 1861.—(English Patent, 26th April, 1861.)

51,544. Wood, represented by Cobbé, of 8, Rue Malar, Paris, for "Improvements in breech-loading fire-arms and barrels."—Dated 11th October, 1861.—(English Patent, 9th April, 1861.)

51,545. Anthoine, of 35, Rue Grange aux Belles, Paris, for "Elastic ties applicable to brushes for dry rubbing floors."— Dated 14th October, 1861.

41,546. Azemar, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Manufacture of an instrument for learning drum beating."—Dated 14th October, 1861.—(English Patent, 27th August, 1861.)

51,547. Barbier, of Loudun, for "A harvesting machine."—Dated 31st October, 1861.

51,548. Beaudet and Duval, the former of 271, Rue St. Jacques, the latter of 4, Rue du Pas de la Mule, Paris, for "A process for tanning hides." Dated 14th October, 1861.

51,549. Bossi, of 154, Grande Rue de la Chapelle, Paris, for "A system of purifying oils."—Dated 16th October, 1861.

51,550. Carr, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in apparatus for forging and working pieces of iron or any other suitable metal or substance."—Dated 15th October, 1861.—(English Patent, 12th April, 1861.)

51,551. Clément, of Saint Amand, for "A kind of horse shoes for horses."—Dated 31st October, 1861.

51,552. COLSENET, of 10, Rue Basse du Chemin de Fer, Epernay, for "Manufacture of so-called 'Silvain paper,' from indigenous textile substances."—Dated 31st October, 1861.

51,553. CURRY, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in instruments for measuring, indicating, and regulating pressure or the flow of liquids."—Dated 15th October, 1861.—(English Patent, 31st May, 1861.)

51,554. DAUDVILLE, domiciled with Léonce Daudville, of 32, Rue du Bac, Paris, for "Flounces for curtains."—Dated 14th October, 1861.

51,555. DEFOSSY, of Anzin, for "A system of pulleys."—Dated 2nd November, 1861.

51,556. DEFOSSY, Brothers, of Anzin, for "A machine for the manufacture of horse-shoes."—Dated 2nd November, 1861.

51,557. FOURNIER DES CORATS, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A safety harness."—Dated 14th October, 1861.

51,558. GADIFFERT, represented by Teyssier, of 43, Rue de Trévise, Paris, for "A safety apparatus applicable to coffee machines and other vessels."—Dated 17th August, 1861.

51,559. GIORDANO DE PHILIPPE, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Extracting fecula and alcohol from plants."—Dated 14th October, 1861.

51,560. LABALLE, of 12, Rue des Petits Champs, St. Martin, Paris, for "A water level with a metrical scale."—Dated 15th October, 1861.

51,561. LAUNOIS and NOEL, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A manometer, applicable also to indicators of a vacuum."—Dated 15th October, 1861.

51,562. LAVALLÉE, of 11, Rue St. Gilles au Marais, Paris, for "Manufacture of vinegar."—Dated 14th October, 1861.

51,563. LEPLANQUAIS, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in trusses."—Dated 14th October, 1861.

51,564. MARTIN, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "A machine for working wood, &c."—Dated 14th October, 1861.

51,565. MICHONNET, domiciled with Layssard, of 78, Rue du Faubourg du Temple, Paris, for "A stone crusher."—Dated 14th October, 1861.

51,566. PEZOT, of Breteuil, for "Iron horses' collars."—Dated 31st October, 1861.

51,567. PIERREDET, of 7, Rue Tourtille, Paris, for "Alkalino-acid baths for nickellizing metals by a direct or indirect process."—Dated 16th October, 1861.

51,568. POULLIER-LONGHAYE, of 17, Rue du Croquet, Lille, for "A guide band for winding off."—Dated 2nd November, 1861.

51,569. ROBERTS, represented by Courrouve, of 28, Rue Feydeau, Paris, for "Improvements in steam engines and generators to be used therewith."—Dated 12th October, 1861.—(English Patent, 11th April, 1861.)

51,570. ROWAN, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in cylinders, drums, and beaters for machines for heckling and preparing flax and other substances."—Dated 15th October, 1861.—(English Patent, 5th October, 1861.)

51,571. DE SANGES and MASSON, the former of 27, Rue de Suresnes, the latter of 8, Rue Gaillon, Paris, for "A system of vertical ventilation for chimneys, sewers, &c., by means of clay tubes."—Dated 16th October, 1861.

51,572. SIMON, of Louvroil, for "A system of expanding joints for steam and other pipes."—Dated 2nd November, 1861.

51,573. SIMPSON, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of lace on looms."—Dated 8th October, 1861.—(English Patent, 8th October, 1861.)

51,574. STEINER, of 73, Rue St. Maur-Popincourt, Paris, for "An apparatus for removing ferrules or rings from tubular and other steam boilers."—Dated 15th October, 1861.

51,575. WILDE, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in electro-magnetic telegraphs."—Dated 8th October, 1861.—(English Patent, 8th April, 1861.)

51,576. ADAMS, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of curry-combs with flexible backs."—Dated 18th October, 1861.—(American Patent, 18th October, 1861.)

51,577. ALAUZET. of 7, Rue Bréa, Paris, for "A printing press."—Dated 18th October, 1861.

51,578. BARANOWSKI, of 45, Rue St. Sébastien, Paris, for "Improvements in portable camp beds."—Dated 18th October, 1861.

51,579. BARRET, of 54, Rue du Cherche-Midi, Paris, for "A system of escapements applicable to clock-making and other trades."—Dated 19th October, 1861.

51,580. BIGNON, represented by Mathieu of 45, Rue St. Sébastien, Paris, for "Improvements in cocks."—Dated 16th October, 1861.

51,581. BILBILLE-FAYARD, sen., domiciled at 157, Grande Rue de Vaugirard, Paris, for "Using five-leaved ivy and vine shoots for paper and tissues."—Dated 17th October, 1861.

51,582. BILBILLE-FAYARD, sen., domiciled at 157, Grande Rue de Vaugirard, Paris, for "Bleaching vegetable, textile, and ligneous substances."—Dated 17th October, 1861.

51,583. BINET, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "Improvements in assembling the uprights and panels of flower cases."—Dated 17th October, 1861.

51,584. BISHOP, represented by Fleischmann, of 18, Rue Moncey, Paris, for "Improvements in pumps."—Dated 19th October, 1861.—(English Patent, 2nd October, 1861.)

51,585. BOUILLE, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the construction of lathes."—Dated 18th October, 1861.

51,586. Boulay, of 19, Rue Ste. Marguerite, St. Germain, Paris, for "A machine for washing and dry-rubbing floors."—Dated 19th October, 1861.

51,587. Bowes-Stevens, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in condensing apparatus for steam engines."—Dated 17th October, 1861.

51,588. Brunet, of 31, Rue des Bourdonnais, Paris, for "A safety railway-carriage."—Dated 19th October, 1861.

51,589. Cagnac, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "A mode of transmitting railway signals for the purpose of preventing collisions on railways."—Dated 17th October, 1861.

51,590. Crétal, represented by Le Blanc, of 2, Rue Ste.-Appoline, Paris, for "A system of smoking pipes of French amber and French lava."—Dated 18th October, 1861.

51,591. Delaroa, of 112, Rue de Grenelle-St' Germain, Paris, for "Applying wire-gauze of aluminium to Davy's safety lamps."—Dated 17th October, 1861.

51,592. Delvaux, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "A fat compound called 'Anti-rust.'"—Dated 18th October, 1861.

51,593. Dequevauviller, represented by Dieulouard, of 19, Rue de Bruxelles, for "A self-acting detonating signal with a battery."—Dated 17th October, 1861.

51,594. Gibiat, of 31, Rue Quincampoix, Paris, for "Handles of umbrellas, parasols, &c."—Dated 18th October, 1861.

51,595. Gras, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Schist lamps for carriages."—Dated 17th October, 1861.

51,596. Hascard and Dean, represented by Ansart, of 33, Boulevart de Strasbourg, Paris, for "Improvements in machines or looms for the manufacture of looped tissues."—Dated 19th October, 1861.—(English Patent, 20th April, 1861.)

51,597. Hette, represented by Meunier, of 18, Rue du Pont-Louis-Philippe, Paris, for "Using the Archimedian screw for conducting and distributing the husks of root cutters in macerating apparatus, and spreading acid thereon in a uniform and continuous mode."—Dated 17th October, 1861.

51,598. Lamblin, of Avallon, for "Wine casks with wooden or iron hoops."—Dated 30th October, 1861.

51,599. Lombard, of 1, Rue Gît-le-Cœur, Paris, for "A salvage hook for fires."—Dated 16th October, 1861.

51,600. Ruer, of 7, Rue d'Enghien, Paris, for "A kind of umbrella."—Dated 17th October, 1861.

51,601. Siadous, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in the manufacture of petticoats, cages, crinolines, &c."—Dated 16th October, 1861.

51,602. Sievers, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in the mechanism of pianos."—Dated 17th October, 1861.—(Italian Patent, 3rd June, 1861.)

51,603. Sollot, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Obtaining frames with reliefs imitating carved wood or metal."—Dated 17th October, 1861.

51,604. Tribouillet and Gautier, of 87, Boulevart Sebastopol, Paris, for "Improvements in processes and apparatus for the manufacture of combustible gas."—Dated 19th October, 1861.

51,605. Walton and Beard, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in the manufacture of varnish, applicable to waterproofing and coating tissues, and to other purposes."—Dated 18th October, 1861.—(English Patent, 30th September, 1861.)

51,606. Wery, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "A mechanical arm-chair applicable to beds and carriages."—Dated 18th October, 1861.

51,607. Assi, of Beaune, for "An hermetic igniting apparatus with an interior rubbing surface."—Dated 2nd November, 1861.

51,608. Barrat, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in fire-arms."—Dated 19th October, 1861.

51,609. Belin and Jeannez, of St. Martin-au-Laert, for "A process for filtering the residues of defecation in the manufacture of beetroot sugar."—Dated 31st October, 1861.

51,610. Borie, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A machine for the manufacture of paper bags."—Dated 19th October, 1861.

51,611. Cavalerie, of 28, Rue Mery, Bordeaux, for "A motor applicable to all machines."—Dated 8th November, 1861.

51,612. Coutelan, of 70, Grande Rue, Marseille, for "A machine for working stone and marble." Dated 30th October, 1861.

51,613. D'Artois, of 81, Rue du Cherche-Midi, Paris, for "A microscope for looking at photographs."—Dated 21st October, 1861.

51,614. Dodds, represented by Tolhausen, of 35, Boulevart Bonne, Nouvelle, Paris, for "Improvements in the manufacture of railways, switches, crossings, tyres of railway and other carriages, axles, piston rods of steam-engines, and generally of all parts of machinery requiring hard surfaces of contact or friction."—Dated 19th October, 1861.

51,615. Fouché, of 134, Rue St. Maur, Paris, for "Improvements in pumps and machines with a direct rotation."—Dated 21st October, 1861.

51,616. Galland, of 46, Rue Notre Dame de Lorette, Paris, for "An electric counter."—Dated 19th October, 1861.

51,617. Gessner, represented by Mathieu, of 45, Rue Saint Sébastien, Paris, for "Improvements in cards."—Dated 19th October, 1861.

51,618. Gidauvan, of Reillanne, for "A digging machine."—Dated 2nd November, 1861.

51,619. Groslard, of Mèze, for "An apparatus for filtering wine, spirits, liqueur, &c."—Dated 6th November, 1861.

51,620. GUÉGAN, of St. Germain-en-Laye, for "A moveable counting spelling book."—Dated 5th November, 1861.

51,621. GUIGARD, domiciled with Feuillat, of 18, Rue Ferrandière, Lyons, for "Improvements in looms for weaving piled fabrics."—Dated 31st October, 1861.

51,622. HAUSSADIS, of 12, Rue Notre Dame des Champs, Paris, for "A circular machine for sawing stones, marble, and wood."—Dated 19th October, 1861.

51,623. HUARD, of Rue St. Laud, for "A photographic album with an improved elastic back."—Dated 6th October, 1861.

51,624. JACQUIN, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in machines for the manufacture of tricot meshes."—Dated 19th October, 1861.

51,625. LACAMBRE, of 7, Rue de l'Eau, Reims, for "A system of rocking treadles applicable to weaving machines."—Dated 6th November, 1861.

51,626. LAGO, of Auch, for "Improvements in his mode of geometrical constructions of paper for studying elementary geometry, &c., as patented 17th November, 1853."—Dated 8th November, 1861.

51,627. LIEBERMANN, of 18, Boulevart du Temple, Paris, for "A press for the manufacture of sugar."—Dated 19th October, 1861.

51,628. MATRICON and CHAVANNE-BRUN, of La Terrasse and St. Chamond, for "A moderating apparatus aplicable to hydraulic and steam motors."—Dated 4th November, 1861.

51,629. ORIOL and ALAMAGAY, of St. Chamond, for "Simultaneously twisting and winding textile substances on bobbins."—Dated 5th November, 1861.

51,630. SAVART, of 123, Rue St. Martin, Paris, for "A machine for cutting leather and stuffs for foot coverings."—Dated 19th October, 1861.

51,631. SEGUY, of Béziers, for "A rocking press."—Dated 7th November, 1861.

51,632. SERRET, HAMOIR, DUQUESNE, and Co., of Valenciennes, for "Improvements in the manufacture of sugar."—Dated 6th November, 1861.

51,633. SOLON, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A mode of stoppering all kinds of vessels and bottles."—Dated 19th October, 1861.

51,634. SOUMEILLAN, of l'Isle en Dodon, for "An escapement for watches."—Dated 31st October, 1861.

51,635. STEVENS, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in condensors and condensing apparatus for steam engines."—Dated 19th October, 1861.

51,636. TRUDELLE, of Angers, for "A sizing carriage."—Dated 5th November, 1861.

51,637. VARILLAT and LANGLOIS, of 7, Rue des Ursulines, Rouen, for "An apparatus for extracting condensing water."—Dated 4th November, 1861.

51,638. AUFRAY and TABAR, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Designs and engravings on slates and means of obtaining stereotype plates therefrom for printing and other purposes."—Dated 21st October, 1861.

51,639. BARUSSEAU, of 117, Rue d'Enfer, Paris, for "A watch case, called 'Revolver.'"—Dated 21st October, 1861.

51,640. BREINE, of 3, Passage Péquet, Paris, for "Improvements in the manufacture of dies and matrices of cast steel."—Dated 23rd October, 1861.

51,641. BLANCHARD, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in the manufacture of articles made of terra cotta, stoneware, and plastic clays, adapted for the construction of fireproof stairs, steps, landings, slabs, tiles for roofing, chimney shafts, columns, posts, pedestals, statues, and other similar articles."—Dated 21st October, 1861.—(English Patent, 3rd April, 1861.)

51,642. BOURQUIN, represented by Millet, of 20, Rue Levisse Montmartre, Paris, for "Applying plated mosaics to covers of books and photographic albums."—Dated 21st October, 1861.

51,643. CABOURG, of 2 and 4, Rue du Joan St. Honoré, for "A machine with an endless thread for screwing leather."—Dated 21st October, 1861.

51,644. CARON, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A spoon far absorbing liquids, &c."—Dated 22nd October, 1861.

51,645. CHESSEX, of 52, Rue Lafayette, Paris, for "Cutting and dividing teeth of gearings in their moulds."—Dated 23rd October, 1861.

51,646. CHEVALLIER, of 13, Rue de Poitou, Paris, for "Glass articles of joinery and cabinet work of all kinds of colours."—Dated 22nd October, 1861.

51,647. COIGNET, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "Improvements in preparing plastic beton and obtaining artificial marble and all kinds of stone, by means of powder substances that can be hardened, as patented on the 29th March, 1855, and 10th November, 1859."—Dated 28th October, 1861.

51,648. DONISTHORPE, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in dressing, drying, and mounting thread warps for weaving."—Dated 22nd October, 1861.—(English Patent, 20th May, 1861.)

51,649. DRONNE, of 2, Rue Neuve des Petits Champs, Paris, for "So-called 'Regence pastry.'"—Dated 22nd October, 1861.

51,650. FOURNIER DES CORATS, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A mode of transatlantic conveyance for avoiding the loading and unloading of goods."—Dated 23rd October, 1861.

51,651. GADIER, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Regulator castors for furniture, chairs, &c."—Dated 21st October, 1861.

51,652. GILLOT and MAYER, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A kind of cigar case."—Dated 23rd October, 1861.

51,653. Grenier, Goschler, and Guillaume, represented by D'Aubréville, of 60, Boulevart de Strasbourg, Paris, for "Iron railway fish rails for patten rails."—Dated 21st October, 1861.

51,654. Jourdanet, domiciled with Delaporte, of 16, Rue Ménilmontant, Paris, for "An apparatus for rarefying air in a large recipient that may contain invalids."—Dated 21st October, 1861.

51,655. Laruaz and Bouhallier, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in the construction of irrigators."—Dated 21st October, 1861.

51,656. Lemaire, domiciled with Feuillat, of 18, Rue Ferrandière, Lyons, for "An apparatus for fixing the tension of wefts."— Dated 7th November, 1861.

51,657. Lescure, of 28, Rue des Bois, Paris, for "An embroidering machine with two twin needles and two continuous threads that entwine progressively in a zigzag on the tissue, and on the prescribed line."—Dated 22nd October, 1861.

51,658. Lescure, of 28, Rue des Bois, Paris, for "An embroidering machine with two twin needles and two continuous threads that entwine progressively in a straight line on the tissue in the prescribed direction."—Dated 22nd October, 1861.

51,659. De Mannoury d'Ectot, of 54, Rue Miroménil, Paris, for "Iron ties."—Dated 21st October, 1861.

51,660. Michel, of 9, Rue de Ménars, Paris, for "An atmospheric motive engine."—Dated 23rd October, 1861.

51,661. Morel and Chaigneau, Brothers, of 20, Boulevart de Courcelles, Paris, for "A spare rudder."—Dated 23rd October, 1861.

51,662. Motte, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "A concentric counter applicable to carriages, locomotives, &c."—Dated 5th October, 1861.

51,663. Murat, of 2, Rue Ste. Appoline, Paris, for "Improvements in various optical applications."—Dated 22nd October, 1861.

51,664. Muggridge, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "Improvements in apparatus for washing linen and other textile substances."—Dated 23rd October, 1861.—(English Patent, 1st August, 1861.)

51,665. Petit, of 1, Cours des Prés, Tours, for "A machine for heckling hemp."—Dated 5th November, 1861.

51,666. Rouillier, of 24, Rue St. Bernard, Paris, for "A hot-air stove."—Dated 21st October, 1861.

51,667. Somon, of 78, Rue du Faubourg St. Martin, Paris, for "Improvements in the mechanism of drawing room targets."—Dated 23rd October, 1861.

51,668. Thomazet, represented by Guion, of 29, Boulevart St. Martin, Paris, for "A machine for cutting fire-wood."— Dated 22nd October, 1861.

Certificates of Addition.

46,837. Ali-Ben-Sou-Alle, for "Keyed musical instruments."—Dated 21st September, 1861.

48,313. Allamagny, for "Umbrellas."—Dated 28th September, 1861.

43,673. Barré, for "A tubular motor."—Dated 30th September, 1861.

40,868. Belleville, for "An inexplosive generator."—Dated 23rd September, 1861.

43,834. Beuret, for "Saccharified starch."—Dated 24th September, 1861.

48,512. Binant, for "Canvass for painting."—Dated 27th September, 1861.

34,591. Boland, for "A kneading machine."—Dated 25th September, 1861.

45,654. Bossuat, for "Embossed tissues."—Dated 19th September, 1861.

47,762. Bourdeaud, for "A propeller with paddles."—Dated 9th October, 1861.

39,000. Bruet, for "A counter for carriages."—Dated 21st September, 1861.

47,511. Cantarel, for "Cartridges."—Dated 27th September, 1861.

39,002. Caussade and Barrère, for "A sewing machine."—Dated 25th September, 1861.

47,261. Chameroy, for "Slates."—Dated 21st September, 1861.

48,863. Coignet and Co., for "A furnace."—Dated 24th September, 1861.

51,114. Colombi, for "Optics."—Dated 21st September, 1861.

51,114. Colombi, for "Optics."—Dated 27th September, 1861.

41,298. Delharpe, for "Drawing tissues."—Dated 1861.

46,910. Duchataux, for "A harvesting and mowing machine."—Dated 21st September, 1861.

49,022. Fleischhauer, for "A gas regulator."—Dated 21st September, 1861.

46,975. Frementin, for "A machine for cutting the wood of matches."—Dated 9th October, 1861.

46,815. Garneri, for "Brick paving and paving."—Dated 25th September, 1861.

45,943. Hardy, for "Hammering metal in sheets."—Dated 20th September, 1861.

41,562. Julienne, for "A belt for bathing."—Dated 19th September, 1861.

47,363. Klaesy, for "A regulator of looms."—Dated 24th September. 1861.

47,487. Laforgue, for "A railroad."—Dated 25th September, 1861

49,683. Lesnard, for "A railway break."—Dated 21st September, 1861.

50,643. Lété, for "Sparkling gilt and silvered white wines."—Dated 30th September, 1861.

47,480. Marcel, for "An apparatus for cutting ashlar.—Dated 30th September, 1861.

44,367. Martz, for "Tanning." — Dated 28th September, 1861.

29,558. Maurin, for "Binding ledgers."— Dated 30th September, 1861.

49,404. Merville, for "A harvesting and mowing machine."—Dated 28th September, 1861.

48,559. Millar, for "A cork machine."—Dated 26th September, 1861.

48,755. Million, for "Heating by means of an external fire-place."—Dated 26th September, 1861.

50,360. Péan, for "A top."—Dated 25th September, 1861.

46,951. Philippe, for "A watch without a key."—Dated 27th September, 1861.

49,164. Pouillet, for "A sewing machine." — Dated 21st September, 1861.

44,974. Rigolier, for "Rests of rails and railway sleepers."—Dated 30th September, 1861.

51,189. Robert, for "Shirts with moveable fronts." —Dated 24th September, 1861.

49,414. Roux, for "An apparatus for preventing coach accidents."—Dated 3rd October, 1861.

46,831. Soret, for "A machine for embroidering buttons."—Dated 20th September, 1861.

41,289. Alfraise, for "Heckling hemp."— Dated 21st October, 1861.

44,313. Banc, for "A liquid for diluting liquids."— Dated 3rd October, 1861.

49,484. Bertaud, for "A dentifrice liquid."— Dated 21st October, 1861.

50,693. Betis, for "A packet box."—Dated 26th October, 1861.

48,125. Bonchard, for "An artificial cooler."— Dated 25th October, 1861.

51,234. Boyer, for "Goffered gloves."—Dated 9th October, 1861.

29,899. Brouillet-Cacheleux, for "Pasteboard mouldings."—Dated 17th September, 1861.

50,631. Charlet and Coulon-Destouches, for "Collars and ruffles."—Dated 4th October, 1861.

36,996. Chaudet, for "Washing wool."—Dated 19th October, 1861.

51,114. Colombs, for "Optics."—Dated 7th October, 1861.

47,609. Cordier, for "Carriage springs."—Dated 25th October, 1861.

51,016. Croc, for "Aniline ink."—Dated 12th October, 1861.

50,469. Dagron, for "Optical apparatus."—Dated 5th August, 1861.

51,077. Duchamp, for "Chenille."—Dated 7th October, 1861.

43,460. Dumont and Bourgeois, for "Penning cattle."—Dated 3rd October, 1861.

50,219, Faget, for "Daily advertisements."—Dated 16th October, 1861.

49,422. Fauvel, for "Candlestick with a glass chimney."—Dated 30th September, 1861.

50,126. Filliette, for "A counter."—Dated 2nd October, 1861.

47,708. Fournier, for "Horses' collars."—Dated 5th October, 1861.

42,747. Ganne, for "A thrashing machine."— Dated 25th October, 1861.

47,102. Garcin, for "A plough."—Dated 22nd October, 1861.

47,145. Grollier and Porte, for "A mastic that resists the action of acids."—Dated 25th October, 1861.

40,813. Jacquet-Robillard, for "A sowing machine."—Dated 11th October, 1861.

48,139. Jobard, for "Bricks and tiles."—Dated 23rd October, 1861.

49,057. Laplace, for "A box for matches."—Dated 30th September, 1861.

50,772. Lesourd, for "Lighting gas."—Dated 11th October, 1861.

50,291. Lirondelle and Morel, for "A pad for postage."—Dated 16th October, 1861.

40,596. Magneval, for "Ink."—Dated 3rd October, 1861.

48,998. Margueritte, Worms de Bomilly, and Lalouel de Sourdeval, for "Treatment of suds."—Dated 5th October, 1861.

43,954. Morot, for "An electro-magnetic motor." —Dated 24th October, 1861.

51,035. Mosselman and Co., for "Manure."— Dated 2nd October, 1861.

38,504. Poivret, for "A knitting frame."—Dated 21st October, 1861.

41,978. Polonceau, for "A locomotive."—Dated 28th December, 1860.

47,055. Ravaisse, for "Plaiting alocs fibres."— Dated 10th October, 1861.

47,935. Rousseau, for "Sugar."—Dated 25th October, 1861.

47,284. Servier, for "A gas regulator."—Dated 7th October, 1860.

31,109. Storet, for "Animal black."—Dated 17th October, 1861.

45,135. Viollet, for "Electricity."—Dated 4th October, 1861.



UNITED STATES OF AMERICA.

(Communicated by the Commissioner of Patents.)

List of Patents, with claims annexed, issued from the United States Patent Office, for the week ending 28th January, 1862, and each bearing that date.

No. 34,233. Thomas K. Anderson, of Hornellsville, N.Y., for an "Improved composition of fuse or slow match for igniting powder under water."

"I claim a compound consisting of the four named ingredients, in or about the same propositions specified, prepared and used in the manner as and for the purposes herein set forth."

No. 34,234. Frederick Andriessen, of Allegheny city, Pa., for an "Improved car truck regulator."

"I claim the application of this self-adjusting regulator with the four leading poles, friction-rollers, &c. (see letters A, B, B, C, C, C, C, D, D, D, D, D, D, D, and E, E, E, E, of the drawings) to R, R, locomotives and cars."

No. 34,235. C. H. Bradley, of Westchester, Pa., for an "Improvement in the muzzle of fire-arms for cutting off cartridges."

"I claim providing a portion or the whole of the end or muzzle of the gun barrel, with teeth, or otherwise sending the same rough, as and for the purpose herein set forth and described."

No. 34,236. O. N. Brainerd, of Marion, Iowa, for "Improved evaporating pans for sacharine liquids."

"I claim, 1st, the arrangement of the pans A and B, in combination with the flue D, at the bottom of the former, and at the top of the latter, constructed and operating in the manner and for the purpose shown and described. 2nd, the arrangement of the strainers G, H, in combination with the pans A, B, C, constructed and operating as and for the purpose specified."

No. 34,237. John S. Brooks, of Rochester, N.Y., for an "Improvement in sad-iron heaters."

"I claim an improved sad-iron heater, consisting of the pan A, divided into separate compartments for each iron, with hinged falling lids or covers *c*, *d*, so arranged that the removal of an iron from one chamber will cause the lid or lids to fall over the adjoining one, substantially in the manner and for the purposes herein described."

No. 34,238. James Burrell, of Central City, Colorado Territory, for an "Improved amalgamator and ore crusher."

"I claim, 1st, a rotating or reciprocating pulverizer and amalgamator B, when constructed with a series of circumferential grooves *a*, each of which is provided with a ball D, arranged as described. 2nd, in connection with the pulverizer and amalgamator B, constructed as described, the cylinder H, provided with an amalgamated inner surface, and arranged to operate conjointly with B, substantially as and for the purpose set forth."

No. 34,239. James M. Clark, of Lancaster, Pa., for an "Improvement in apparatus for feeding mills."

"I claim, 1st, the employment of the revolving cup F, when adjustable, substantially as and for the purpose specified. 2nd, the arrangement of the cup F, the strap *a*, and rine E, secured and connected by means of clips *c*, *c*, substantially as represented. 3rd, the employment of the stationary shield G used and for the purpose specified."

No. 34,240. James W. Clark, of Springfield, Mass., for an "Improvement in tools for making screws."

"I claim the arrangement of the cutters B, C, F, opening *c*, segmental rim *d*, and moveable guide plate G, in combination with the stock A, as and for the purpose described."

No. 34,241. C. A. Codding, of Augusta, Michigan, for an "Improvement in cheese presses."

"I claim the employment of the adjustable bottom C, constructed as set forth, in combination with the hoop or cylinder A, and perforated plunger B, arranged and operating as and for the purpose specified."

No. 34,242. J. M. Connel, of Newark, Ohio, and John S. Hall, of Columbus, Ohio, for an "Improvement in shells for rifled ordnance."

"We claim, 1st, the explosive projectile made of two hollow parts A, A^1, B, B^1, which are fitted together so that a space C exists between their facing ends *a*, *b*, and the part A, A^1, having, circumferentially, segmental cavities D, and the part B, B^1, having angular cavities E, bevelled projections F, and a bevelled continuous circumferential edge C, and the whole being encircled and held together by a lead packing ring H, in the manner and for the purposes herein described. 2nd, constructing the interior of one portion of the projectile with a front and rear rest or shoulder *c*, *d*, and arranging in or against the same an open-ended hollow tube K, for the purpose of separating the contents of the chamber J from the igniting magazine K^1, substantially as and for the purposes set forth. 3rd, in combination with the shoulders *c*, *d*, and tube K, we claim providing a central opening *f*, in the end *a*, of the part A, A^1, and a similar hole *g* in the end *b*, of part B, B^1, and arranging and igniting magazine K^1, K^2, within the hollow tube K, and in the openings *f*, *g*, in the manner and for the purpose herein described. 4th, the combination of a sliding igniting magazine, with the hollow explosive projectile, substantially as and for the purposes herein described."

No. 34,243. Ransom, Cook, of Saratoga Springs, N.Y., for an "Improved lunch box."

"I claim a lunch case, composed of the dishes E, E, E, the vessels F, F, the driving cups G, G, the inner cover C, its rib D, with the case A, and the cover B, the whole constructed and arranged as set forth for the purpose specified."

No. 34,244. Simeon Coon, of Ithaca, N.Y., for an "Improvement in window sash, and setting glass therein."

"I claim my peculiar construction of window sash with loose mullions adjusted as described, and slots cut through the frame, for the purpose of admitting the glass, all in combination with the method of securing the glass as set forth in my specification."

No. 34,245. Joseph H. Duffield, of Glassboro, N.J., for an "Improvement in cases for railroad tickets."

"I claim the application to a ticket case, constructed in any suitable form of the sliding spring stem C, constructed and arranged to operate in combination therewith, and the tickets contained, in the manner described and set forth, for the purpose specified."

No. 34,246. O. L. Edwards and Nelson Gabel, of Gratis, Ohio, for an "Improvement in fences."

"We claim, in the construction of portable fences, the combination and arrangement of keys b^1, b^{11}, *d*, *d*, post C, and E, and rails A, substantially as set forth."

No. 34,247. John Ellis, of Detroit, Michigan, for an "Improvement in carriage gates."

"I claim the extension H, cap K, latch I, and connecting link *a*, in combination with the ropes M, M^1, when these several parts are constructed, arranged, and operated as and for the purposes herein set forth."

No. 34,248. George F. Evans, of Norway, Maine, for an "Improvement in plane stocks."

"I claim my improved plane having its body A, its bearing plate E, its screws G, G[1], traversing nuts H, H[1], and connecting rods I, I, constructed and arranged in relation to each other, and so as to operate together, as set forth."

No. 34,249. Samuel W. Francis, of New York, N.Y., for an "Improved pocket match box."

"I claim the combination and arrangement of the box A, B, the drawer C, the springs F and J, and stopper M, substantially as and for the purpose specified."

No. 34,250. Thomas J. Griffin, of Brooklyn, N.Y., for an "Improved combined camp cot and chest."

"I claim the within-described combination of camp cot and chest, consisting of the three sections of matress frame D, D[1], E, hinged together so as to have the two former fold up compactly upon the latter when not in use as a couch, the latter forming a tight cover for the chest A, and it a support or bedstead for the couch, the whole arranged to operate in the manner and for the purpose set forth."

No. 34,251. Hiram Grant, of Chicago, Illinois, for an "Improved roofing composition for railroad cars, &c."

"I claim the above-named composition matter or ingredients, when prepared in the proportions and in the manner specified above, and applied as therein stated."

No. 34,252. Florian Grosjean, of New York, N.Y., for an "Improvement in sheet metal spoons."

"I claim corrugating the handle of spoons or forks made of single pieces of sheet metal with the central corrugation and outer bead combined, substantially as and for the purpose herein specified."

No. 34,253. Peter W. Hardwick, of Williamsburg, Indiana, for an "Improved apparatus for attaching and detaching horses to and from carriages."

"I claim the clamps as constructed in connection with the plates or their equivalents in combination with the spring, the whole being constructed arranged, and operated substantially as above set forth."

No. 34,254. John J. Hayden, of Indianapolis, Indiana, for an "Improvement in metallic roofing."

"I claim the combination in diamond sheet metal roofing, of the peculiar character described, of the upward and downward bent or curved points S, S[1], substantially in the manner and for the purposes described. 2nd, the combination of the diamond sheets, eave, side, and comb or saddle triangular pieces and cleats, with the roof of a house, the said parts being all constructed and applied in the manner and for the purposes described."

No. 34,255. Thomas H. and Henry James, of Stockport, N.Y., for an "Improvement in power looms."

"I claim the arrangement of the elbow levers I, I, rods H, H, and weighted levers E, with the whip roll G, straps D, D, and yarn beam C, in the manner herein shown and described."

No. 34,256. Albert Keith, of Lisbon, Illinois, for an "Improvement in grading and excavating machines."

"I claim, 1st, constructing the endless apron E[1] of a series of metal plates H[1], attached to rods *f*, the ends of which are connected to chains *g*, *g*, and all arranged as shown, to admit of a certain degree of tilting of the plates H[1] as they pass around the pulleys F[1], as and for the purposes set forth. 2nd, attaching the beam A to the oblique bars O, R, by means of joints or hinges P, Q, in connection with the adjustable slide M[1] fitted on the perforated bar L[1], provided with a catch or lever N[1], and attached to the upright notched bar I, all being arranged as shown to admit of the adjustment of the beam A, and cutter or share B, in a transverse direction, as set forth. 3rd, supporting the front part of the beam A by means of a caster wheel C, connected with an adjustable lever E[1], in combination with the wheel J, which supports the back part of the beam A, and is connected with the adjustable lever K, all arranged as and for the purpose specified."

No. 34,257. E. M. Luckett, of Philadelphia, Penna, for an "Improved mode of cleaning snow from railroad tracks."

"I claim the addition of a chamber over the dome of the steam boiler of a locomotive engine, and the introduction of a pipe to convey the waste steam to the rail (as set forth in the drawing), which, with the aid of an improved snow shovel will cleanse the rail from snow, frost, and dirt, thus improving the speed of the engine, and turning the waste of steam to a profitable account."

No. 34,258. Edward Lynch, of Buffalo, New York, for an "Improvement in attaching beds to tents."

"I claim, 1st, the arrangement of the beds E, E, the bars D, the strap J, and the cords H, I, as and for the purpose herein specified. 2nd, the employment of the slides *d*, *d*, with loops or staples attached, used in connection with the bars D, D, in the manner and for the purpose herein specified."

No. 34,259. Jacob Martin, of Mound city, Illinois, for an "Improvement in relieving slide valves of pressure."

"I claim combining the slide valve with the piston D by means of a roller G attached to the valve, and a bar H attached to the said piston, substantially as and for the purpose herein specified."

No. 34,260. Thomas Miles, of Philadelphia, Pa., for an "Improvement in slinging knapsacks."

"I claim sustaining a knapsack upon the back and shoulders of the wearer by means of a single strap and a single fastening, substantially as described."

No. 34,261. James T. Minard, of Danbury, N.H., for an "Improvement in seats for wagons and sleighs."

"I claim the peculiar construction of the adjustable seat B in combination with the movable seat A to a wagon or sleigh body, so as to form a single or double seated wagon or sleigh, arranged as and for the purpose specified."

No. 34,262. William Morrisson, of Chadd's Ford, Pa., for an "Improvement in combined iron and steel ploughs."

"I claim a mould board for a plough, composed of a steel face and an iron back, made and united to the plough substantially as described. I also claim, in combination with a permanent land side and a bar share, as described, a steel cutter that is united to the outside of said land side, and by a groove to the bar share, in such manner as to be adjusted thereon as it wears away, as herein set forth and described."

No. 34,263. Joseph B. Prescott, of Waterford, N.Y., for an "Improvement in breech loading cannon."

"I claim the arrangement of the adjustable bands and bars with the breech piece and shoulders C, in the manner herein shown and described."

No. 34,264. Thomas J. Price, of Industry, Illinois, for an "Improvement in construction of evaporating pans for saccharine and other juices."

"I claim, 1st, an evaporator for saccharine or other juices, having partitions J, extending from side to side, with openings at alternate ends, and secured by bolts or rivets between upturned flanges *a*, of the bottom plates, all as herein-before explained. 2nd, the combination of the vertical flanges *a*, horizontal lapping edges *a*[1], and painted canvas luting *n*, all arranged and employed in the manner and for the purposes herein-before explained. 3rd, the combined arrangement of the furnace A, contracted throat C, and guards R, applied to the rear divisions of the pan, all as herein shown and described, and for the purposes specified."

No. 34,265. D. Brainerd Ray, of Circleville, Ohio, for a "Type-setting machine."

"I claim constructing tubes C, C (or their equivalents), with two branches or arms M and M[1], and a regulator (*g*), and its mechanism, substantially in the manner and for the purpose set forth. 2nd, I claim the spirally curved or twisted tube M, in combination with the main tube C, substantially in the manner and for the purpose set forth. 3rd, I claim arranging the tubes or their equivalents, like the radii of a circle. 4th, I claim the catch *t*, for feeding out the type. 5th, I claim the spring (*f*), slide (X), and rock-shaft (*e*), combined with the composing stick S, substantially in the manner and for the purpose set forth."

No. 34,266. T. C. Rice, of Cambridgeport, Mass., for an "Improvement in breech-loading ordnance."

"I claim the combination of the slide B, with the screw cap C, and barrel A, substantially in the manner herein shown and described."

No. 34,267. Miles B. Riggs, of New York, N.Y., for an "Improvement in guard fingers for harvesters."

"I claim the bar E, made either entire or in sections, and provided with the lugs F, as described, when arranged in combination with the fingers and counter cutters, in the manner and for the purpose specified."

No. 34,268. John P. Rollins, of Cedar Rapids, Iowa, for an "Improvement in shells for rifled ordnance."

"I claim the combination of a sliding spring rod F, projecting in front of the shell with a discharge nipple *e* formed upon a screw D, inserted from the rear, all substantially as and for the purposes set forth."

No. 34,269. W. J. Sage, of Steubenville, Ohio, for an "Improvement in mode of propelling cars."

"I claim the two drums or cylinders D, F, provided with the toothed rims E, G, with the pinions C of the axles A placed between them, as and for the purpose herein set forth."

No. 34,270. William Romans, of Columbus, Ohio, for an "Improvement in locomotive cars."

"I claim, 1st, the manner substantially as herein described of adapting a locomotive and a car for direct connection with one another in such manner that all the connections of the locomotive are free to turn independently of the car, and that the weight of the front end of the car rests centrally or nearly centrally on the locomotive track, and thus is made available for steadying the locomotive on the track while the centre of motion of the locomotive is transferred from the rear end to the centre of the truck, all as and for the purpose set forth. 2nd, making the front bolster G, and also the fender E, removable, substantially as and for the purpose set forth. 3rd, in combination with the construction and use of the devices, as set forth in the 1st claim, the manner substantially as herein described of arranging the valve rods, link motions and the eccentrics, between the inner faces of the locomotive-driving wheels and the outer sides of the locomotive truck frame for the purpose set forth. 4th, so constructing and arranging the car and the rear truck, and connecting the same, that the truck, while the car is resting upon it, may be moved a greater or less distance toward the locomotive, and when thus moved shall be free to turn curves, substantially as and for the purpose set forth. 5th, the combination of the flanged plate *v*, *i*, of the rear truck, and the tubular projection *h* of the rear bolster J of the car, substantially as and for the purpose herein described."

No. 34,271. John F. Scholfield, of Lawrence, Mass., for an "Improvement in shuttles."

"I claim the application of this device made from either metal or any other suitable material, to a weaver's shuttle for preventing kinks in the weft while passing from the shuttle to the cloth, substantially as set forth."

No. 34,272. Joseph Short, of Boston, Mass., for an "Improvement in knapsacks."

"I claim, 1st, arranging, disposing, and attaching straps to and upon a knapsack, so that its top may be allowed to fall away from contact with the shoulders and spine of the wearer, for the purpose of ventilating the back and shoulders of the wearer, and at the same time cause a different set of muscles to be brought into action, in the manner substantially as described. 2nd, I claim arranging and adapting straps to support and confine a knapsack to the shoulders and back of the wearer, so that it can be raised and lowered in a vertical line or nearly in a vertical line upon the back and shoulders of the wearer, and be held in the desired fixed position on such line, at the will of the operator, in the manner substantially as described. 3rd, I claim a combined neck and shoulder strap having connections with a knapsack by intermediate straps, at points which are at or near the top and base of the knapsack, for the purpose specified. 4th, I claim the combination of the removable curved side walls, with the adjusting straps, whereby the body of the knapsack is adapted to the back and shoulders of the wearer in its different positions, as and for the purpose described."

No. 34,273. Albert H. Silvester, of Boston, Mass., for an "Improvement in the manufacture of bootees."

"I claim the bootee constructed as above described with the adjustable fastenings, and whereby all the above advantages are combined, as an improved new article of manufacture for the purposes specified."

No. 34,274. Leander E. Smith, of New Haven, Connecticut, for an "Improvement in railroad station indicators."

"I claim the combination of the box, rollers, curtain and spring, substantially as described and for the purpose set set forth."

No. 34,275. Mathew Smith, of Pitsburgh, Pa., for an "Improvement in steam boilers."

"I claim combining with the interior of a cylindrical boiler a steam receiver or receivers wholly or partially immersed in the water, and permanently held in such proximity to the bottom of the boiler as to produce a thin sheet of water between the receiver and the boiler, for the purpose as herein set forth. 2nd, I also claim the combination of a steam receiver, by means of trunnions, with the interior of a cylindrical boiler, in the manner and for the purpose as herein set forth. 3rd, I also claim the combination of a blow-off valve or cock, with a steam receiver, in a cylindrical boiler, passing through the boiler and communicating only with the interior of the receiver, for the purpose as herein-before stated."

No. 34,276. Daniel W. Swift, of West Falmouth, Mass., for an "Improved clothes wringing machine."

"I claim the springs E, E, constructed of steel, of the form shown when said springs are applied to the cylinder A of the frame of the device to form a support for the lower roller G, and at the same time admit of the upper roller G being applied to them so that the springs will press said roller G on roller F, as set forth. I further claim the guide pins I, I, when attached to the bar H, fitted on the springs E, E, and placed in relation with the rollers F, G, as and for the purpose specified."

No. 34,277. Andrew Turnbull, of West Meriden, Conn., for an "Improvement in lamps."

"I claim combining with the tube *f* a spindle crank *j*, snuffer or extinguisher j^1, substantially as and for the purpose described."

No. 34,278. John S. Whitehill, of Westchester, Pa., for an "Improvement in running gear of wagons."

"I claim the adjustable coupling pole A, held by the king bolt D, passing through the rear end of hounds and circular plate E, all in combination as herein described and for the purposes set forth."

No. 34,279. William Wicken, of Muscoda, Wis., for an "Improvement in grain separators."

"I claim operating the screens D^1, G, and giving them a reciprocating sliding movement through the medium of the bell crank F, fitted in the shoe C, and connected to the screens D^1, G, by means of the hook E, and rod *k*, and also to a stationary rod *j*, the screens being operated by the movement of the shoe C, all arranged in the manner described."

No. 34,280. G. K. Dearborn, of Abington, Mass., assignor to Samuel T. Tapley, of Chelsea, Mass., for an "Improvement in heaters for passenger cars."

"I claim the furnace for railway and street cars constructed substantially as described with the flues K, and auxiliary flues, said furnace being arranged under the floor of the car, and operating in the manner substantially as set forth."

No. 34,281. Josee Johnson, of New York, N.Y., assignor to himself and John Ward, jr., of Brooklyn, N. Y., for an "Improved clothes wringer."

"I claim, firsf, the within described metallic frame for a wringing machine constructed in two parts A, B, the dividing line passing through the axes of the rollers C, D, and the sides being so formed as to partially enclose the said rollers.

and serve as guides for the clothes, substantially as and for the purposes herein described. Second, I also claim the recess G, in each end of each of the parts A and B, so made that when the parts A and B are placed together they form an enclosed space for the springs H, substantially as herein set forth."

No. 34,282. James A. Hamer, of West Vincent, Pa., assignor to Wm. L. Paxson, of Philadelphia, Pa., for an "Improvement in brick moulds."

"First, I claim the combination of the side pieces A, A, with their angular grooves, with the cross pieces C, D, double crank shafts E, E, and lifting pieces *f*, *f*, *f*, *f*, constructed and operating in relation to each other substantially as described. Second, the combination of the vibrating valves *h* with the sides A, A, and cross pieces, substantially as and for the purposes set forth."

No. 34,283. Wm. Peters, of Baltimore, Md., assignor to himself and Robert B. Porter, of same place, for an "Improved packing for steam and other engines."

"I claim the packing herein described for steam and other joints, composed of asbestos and vegetable or animal fibre or material."

No. 34,284. Henry T. Promertze, of Philadelphia, Pa., for an "Improvement in automatic car coupling."

"I claim the jaws *b*, *b*, the sockets *c*, *c*, the slots *i*, *i*, in combination with the releasing lever *d*, spring *g*, case or box *a*, with its projections *h*, *h*, substantially as shown and described."

No. 34,285. David M. Mefford, of Cincinnati, Ohio, for an "Improvement in projectiles for fire-arms."

"I claim a projectile having a metallic head of smaller diameter than the bore of the piece with which it is intended to be used, and a shaft of wood or other light material, the greatest diameter of which fits the bore or nearly so when the parts are so formed and combined that the greatest diameter of the shot is in the rear of the centre of the figure, and the centre of the figure is in the rear of the centre of gravity, substantially as herein shown and explained."

Re-issues.

No. 1261. St. John O. Doris, of Philadelphia, Pa., for an "Improvement in fertilizers."—Patented 24th December, 1861.

"I claim the use of coal ashes as a basis for deodorizing, absorbing, and retaining of animal, vegetable, and mineral matter, in solution or otherwise, when united in a fertilizing compound, substantially as herein set forth."

No. 1262. Byron Densmore, of Sweden, N.Y., assignor to D. M. Osborne, of Auburn, N.Y., and W. A. Kirby, of Buffalo, N.Y., for an "Improvement in harvesters."—Patent 10th February, 1852.

"I claim, 1st, hanging the driving in a supplementary frame, or its equivalent, which is hinged at one end to the main frame, while its opposite end may be adjusted and secured at various heights, or be left free as desired, whereby the cutting apparatus may be held at any desired height for reaping, or be left free to accommodate itself to the undulations of the ground for mowing, substantially as described. 2nd, the employment in a harvesting machine of a wheel, provided with a crank and lever, for the purpose of raising and lowering the outer end of the finger bar to cut high or low, substantially as described."

No. 1263. Frederick E. Sichels, of New York, N.Y., for an "Improvement in the method of opening and closing the valves of steam engines."—Patented 19th October, 1844.—Re-issued No. 8, 1st January, 1861.

"I claim giving to each exhaust valve alternately, while the piston is at or near the end of the cylinder farthest from it, a large amount of motion as compared with the motion of the other exhaust valve at the time, so as to more freely exhaust the cylinder with less extent and greater ease of motion to the valves than has been done heretofore, substantially as described. I also claim imparting these motions to the exhaust valve by means of a rocker interposed between the first motion from the engine and the valves, so that it will increase and diminish its leverage relative to each valve, while moving them, and thereby impart my improved motion."

No. 1264. William W. Wade, of Longmeadow, Mass., for an "Improvement in sewing machines."—Patented 1st February, 1859.

"I claim a driving shaft of a sewing machine, having cranks set at right angles to each other, or so approximating thereto as to overcome or avoid a dead centre in the movement of the shaft, substantially as and for the purpose set forth, in combination with the treadles H, H, the driving pulley N, and a device for preventing a retrograde motion of the shaft. 2nd, I claim, in combination with a sewing machine driving shaft, a ratchet device for preventing a retrograde motion, when such device is caused to cease its action upon the shaft, by means of friction induced between its parts by the forward revolution of the shaft, and is caused to come into action when a back thrust comes upon the shaft, constructed substantially as and for the purpose set forth."

No. 1265. Henry Migeon, of Wolcottville, Conn., assignee of Jean Louis Baudelot, of Harencourt, France, for an "Improvement in process of cooling beer and other liquids."—Patented 1st November, 1859.—Ante-dated 13th April, 1856.

"I claim the process of cooling beer by causing it to trickle in a thin film along one surface of metal, as specified, while such surface is kept cool by the passage in the reverse direction of water or other cooling liquid in contact with the other surface thereof, substantially as and for the purposes specified."

No. 1266. Henry Migeon, of Wolcottville, Conn., assignee of Jean Louis Baudelot, of Harencourt, France, for an "Improvement in apparatus for cooling beer and other liquids."—Patented 1st November, 1859.—Ante-dated 13th April, 1856.

"I claim directing the trickling liquid to be cooled, from the bottom of one pipe to the next below it, by means of a downward projection, substantially as described, whereby the distribution of the liquid to be cooled is more uniformly maintained, and the contact thereof with the whole cooling surface secured, as set forth. Also a trough with perforations for supplying the liquid to be cooled, when combined with a screw or perforated receptacle within said trough, for detaining any foreign substance, or for equalizing the distribution in said trough of the liquid to be cooled, as specified."

No. 1267. Henry Migeon, of Wolcottville, Conn., assignee of Jean Louis Baudelot, of Harencourt, France, for an "Improved apparatus for cooling beer and other liquids."—Patented 1st November, 1859.—Ante-dated 13th April, 1856.

"I claim a cooling apparatus for liquids composed of a vertical range of pipes passing one liquid successively from the lower to the upper pipes in said range, in combination with the perforated trough *d*, or its equivalent, supplying the other liquid which trickles over the surface of said range of pipes, as set forth."

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 4th February, 1862, and each bearing that date.

No. 34,286. Stephen F. Ambler, of Brooklyn, N.Y., for an "Improved amalgamator."

"I claim, first, giving to the pan D the shaking and vibratory motions, for the purpose described. Second, the combination of the agitating barrel H, constructed as shown, with the pan D, for the purpose specified. Third, placing the discharge openings O, upon the side of the pan D, for the purpose set forth."

No. 34,287. Edward D. Baker, of Claremont, New Hampshire, for an "Improvement in the construction of ordnance."

"I claim, first, the flanges projecting from the body of the gun near the breech, in combination with the external screw or straining rods, substantially as and for the purpose herein described. I also claim, in combination with the flanges, the wire wrappings, said flanges furnishing both a support for and the means of securing the ends of the wires, substantially as herein described."

No. 34,288. Frederick H. Bartholomew, of New York, N.Y., for an "Improvement in valve regulators."

"I claim the combination of an open vessel from which water may be removed with a valve that controls the discharge of the water under pressure into said open vessel, by mechanism, substantially as described, so that the weight of water in the open vessel determines the closing of the valve. I also claim the combination of the handle by which the valve is opened with the mechanism above described, and with the open vessel and with the valve, in such manner that the said handle is made available both to open the valve and to adjust the said mechanism, substantially as described."

No. 34,289. Thomas L. Birch and John C. Noble, of Washington, Pa., for an "Improvement in car couplings."

"We claim the combination of the similarly formed double hooked bars C, C^1, c, c^1, springs F, and levers G^1, when the parts are so constructed and arranged as to adapt the hooks to lock together whichever is uppermost, substantially as herein-before explained."

No. 34,290. Stillman A. Clemens, of Rockford, Illinois, for an "Improvement in construction of walls of buildings."

"I claim the method of constructing the walls of buildings and other structures of lath or any narrow strips of wood put up in two or more parallel ties or rows with cross ties of the same, secured between the lath by mortar or nails, to be finished by plastering, when combined either with the vacant space or spaces between the tiers or rows of lath, or with a filling of mortar or other material in the said space or spaces, whether the entire skeleton wall be constructed of the lath work, or it be combined with parts of a frame, substantially as described and for the purposes specified."

No. 34,291. Edward Conroy, of Boston, Mass., for an "Improvement in machines for cutting corks."

"I claim, 1st, the arrangement of the vibrating gauge plate H, and stationary rest G, in combination with the reciprocating knife b, constructed and operating substantially in the manner and for the purpose shown and described. 2nd, the arrangement of the tilting table K, in combination with one or more rotary cutters L, constructed and operating substantially as and for the purpose set forth."

No. 34,292. Samuel and Leander A. Davis, of Providence, R.I., for an "Improved washing machine."

"We claim the combination of the two suds boxes A, B, the latter being fitted within the former, perforated at its sides and bottom, and provided with a perforated reciprocating plunger C, substantially as and for the purpose herein set forth. We further claim the two levers F, G, when arranged and connected together as shown, and with the plunger C, and used in connection with the boxes A, B, as and for the purpose set forth."

No. 34,293. Edward P. Dickie, of Fishkill Landing, N.Y., for an "Improved chimney for lamps."

"I claim, in glass chimneys for illuminating purposes, the transparent partition or partial partition d, when made part of, and of the same piece as, the chimney, substantially as and so as to realize the advantage herein set forth."

No. 34,294. John Dickson, of New Castle, Pa., for an "Improvement in manufacture of sheet iron."

"I claim the use of an enamel or preparation for giving a highly glazed and durable surface to sheet iron, composed of an oxide or oxides of lead and carbon, and prussian blue, pulverized and mixed with drying oil, and a solution of bees'-wax in oil of turpentine or its equivalent, with or without the addition of a small proportion of acid, and in connection therewith, the reviving of metallic lead in the enamel on the surface of the iron during the annealing process, in the manner and for the purpose herein-before described."

No. 34,295. Watson Duchemin, of Charlottetown, Prince Edward's Island, for an "Improved anti-friction bearing of hoisting blocks."

"I claim the sleeve g operating in combination with the box a, and friction rollers h, substantially as described."

No. 34,296. J. H. Ellis, of Brooklyn, Pa., for an "Improvement in mills for crushing apples, sugar cane, &c."

"I claim the fluted rollers B, B, in combination with the rotary cleaners E, E, when said parts are provided respectively with flutes a of semi-cylindrical form and with hawk-bill projections c, and all arranged to operate as and for the purpose herein set forth."

No. 34,297. William Fulton, of Elizabeth City, N.J., for an "Improvement in cooking apparatus."

"I claim the combination of the lamp A with the reservoir or boiler B, jacket C, and extinguisher D, when the whole are arranged, constructed, and operated in the manner specified and for the purpose set forth."

No. 34,298. Benjamin Garvey, of Ashland, N.Y., for an "Improvement in ascertaining position and direction on land and sea."

"I claim the application of rotating bodies to the purpose of preserving normal or base lines or planes, whereby the direction and changes of direction of other planes and lines can be ascertained, for the purposes and in the manner set forth substantially in my herewith accompanying specification."

No. 34,299. Augustus P. Griffing, of East Cambridge, Mass., for "Inkstands."

"I claim my improved inkstand as made with its cap screws and holes, arranged in the parts A, B, substantially in manner and to operate as specified."

No. 34,300. Chauncey H. Guard, of Troy, N.Y., for an "Improved machine for making carriage wheels."

"I claim so proportioning and arranging certain of the parts of said machine that I am enabled, by the auxiliary use of a lathe-rest (R), and a chuck (L), to temporarily convert the same into a turning lathe of suitable proportions for shaping wheel-hubs previous to mortising the same in said machine, all substantially as herein set forth."

No. 34,301. Charles T. Holloway, of Baltimore, Maryland, for an "Improvement in branding and stamping irons."

"I claim a branding or stamping iron consisting of a stock B, false bottom D, moveable types E, and wedges F, or screws in lieu thereof, but otherwise constructed and arranged as herein shown and described."

No. 34,302. George C. Jones, of Alna, Maine, for an "Improvement in shells for ordnance."

"I claim, 1st, a projectile flattened on opposite sides, or at its poles, when its equatorial belt or larger diameter only is perforated with holes or bores perpendicular to the axis of the projectile, for the reception of bullets, substantially in the manner and for the purpose described. 2nd, the removable plug or block D, by means of which, in combination with the enlarged chamber or cavity, I am enabled to use my projectile either as a shot or a shell, substantially as set forth."

No. 34,303. A. S. King, of Commerce, Michigan, for an "Improvement in gas retorts."

"I claim, 1st, the employment of a movable cup B, provided with a hollow cone b, at its bottom, in combination with a retort A, provided with a conical protuberance a, at its bottom, and with a movable cap C, substantially in the manner and for the purpose shown and described. 2nd, the arrangement of the annular belt E, in combination with the outer retort A, and with the inner retort D, as and for the purpose specified."

No. 34,304. Charles W. Krebs, of Baltimore, Maryland, for an "Improved sash supporter and fastener."

"I claim the obliquely grooved slide E, in the described combination with bolts C, *c*, springs D, and a knob or handle F, the latter being employed to move the slide E, and likewise the sash itself, in either direction, all as hereinbefore explained."

No. 34,305. L. B. Lathrop, of San Jose, California, for an "Improvement in apparatus for shrinking tires."

"I claim a tire-shrinking device composed of a block A, provided with a concave E, curved shoulder *b*, guides *d*. *d*, movable jaws B, B, and wedges D, D, all combined and operating as herein shown and described for the purpose set forth."

No. 34,306. Jonas Laubenstien, of Minersville, Pa., for an "Improvement in coal-screens."

"I claim an improved manufacture of screens for the screening and preparing of anthracite coal, or other coals and hard substances, similarly handled and prepared, substantially as above described."

No. 34,307. Ira Leonard, of Lowell, Mass., for an "Improvement in railroad chairs."

"I claim a rail-connecting chair composed of a continuous sheet of wrought iron bent into such a shape that it is enabled to embrace the base and the sides of the abutting ends of two rails, whilst it is rendered laterally elastic and vertically stiff by means of a hollow rib or fin immediately beneath the embracing jaws of said chair, all substantially as represented in the accompanying drawings. In connection with my said improved rail-connecting chair, I also claim the use of the wooden cushion E, or the equivalent thereof, in the manner and for the purpose herein set forth."

No. 34,308. James Y. Leslie, of Brooklyn, N.Y., for an "Improvement in tobacco holders."

"I claim the combination and arrangement of the stopple 1, charger 2, gate 3, spring 4, match box 10, cover 11, pipe cleaner 6, the receptacles 7 and 9, with the case 8, or their equivalents, for the purposes heretofore set forth and described."

No. 34,309. Thomas J. Mayall, of Roxbury, Mass., for an "Improvement in restoring waste rubber."

"I claim the combining or incorporating of waste vulcanized metallic or hermized rubber, with vegetable tar or fine oils, for the purpose and substantially in the manner as set forth."

No. 34,310. George B. McClinch, of Hallowell, Maine, for an "Improved valve for hydraulic engines."

"I claim the arrangement substantially as described of the two opposite port faces of the valve as well as those of its seat. I also claim the connection piece *f*, and its passage *e*, in combination with the two valve plates, their seat and chest, when the two opposite port faces of the valve, and those of the seat thereof, are arranged in manner substantially as hereinbefore described."

No. 34,311. A. McGriffie, of Rochester, N.Y., for an "Improvement in truss girders for bridges."

"I claim the combination with the catenary series of links A, A, of a cord C, joint blocks B, B, posts E, E, and diagonal braces *f*, *f*, the whole arranged substantially as herein specified. And I also claim the joint blocks B, B, serving the three purposes of connecting the links A, A, supporting the joints of the chord, and connecting the diagonal braces *f*, *f*, with the chain of links, substantially as herein specified."

No. 34,312. Charles Monson, of New Haven, Conn., for an "Improved writing desk."

"I claim the application of the cover B, to the drawer holder or box A, in manner and so as to operate therewith substantially as specified. I also claim the improved drawer as made with the elevating bottom and mechanism combined with the said bottom and the drawer frame, the whole being arranged substantially in manner and to operate as specified."

No. 34,313. Charles Monson, of New Haven, Conn., for an "Improvement in ladders and staging for artisans."

"I claim the combination of the two sets of parallel bars or ladders, a base or foot connection, and a leg stand or pair of stands, or the mechanical equivalent therefor, the whole constituting a ladder or artisan's stage substantially as described."

No. 34,314. Charles Monson, of New Haven, Conn., for an "Improved folding staircase and ladder."

"I claim the above-described ship ladder or folding staircase or combination of stair plates (or mechanical equivalents) and parallel bars, arranged and connected substantially in manner and so as to operate as described. I also claim the combination and arrangement of a series of hand holes with the said stair plates (or their equivalents) and their parallel bars when arranged and connected substantially in manner and so as to operate as specified. I also claim the combination of a spring catch and a series of notches or mechanical equivalents therefor with the stairway, constructed of stair plates and parallel bars, arranged in manner and so as to operate substantially as set forth."

No. 34,315. Hugh W. Mosher, of Coeymans, N.Y., for an "Improvement in cooking stove."

"I claim the plate G, having a grate H attached, when used in combination with the front plate of the stove, the fire chamber C, flues *a*, *a*, *c*, and the draught openings *f*, *f*, *h*, *h*, *i*, as and for the purpose specified."

No. 34,316. George Owen, of Jacksonville, Illinois, for an "Improved coupling for double plows."

"I claim connecting two single plows by means of the hinged coupling pieces or rods *s*, *s*, attached to the beams of said plows in the rear of the standards thereof, so as to bring the plows close together, and thereby from a double mould-board plow, in the manner and for the purpose described. I also claim the combination of the curved or bent pieces *t*, *t*, and the sliding joints of the bars C and D, in the manner and for the purpose specified. I also claim connecting the compound curved or bent bar C with the bar D, by means of the chain *x*, or its equivalent, for the purpose herein set forth. I also claim the combination of the front curved stretcher bar B^1, and jointed bars C, D, for the purpose of connecting two plows as set forth. I also claim the combination of the front straight bar B with the curved or bent jointed bar C, and straight jointed bar D, for the purpose of connecting two plows as specified."

No. 34,317. Wm. H. Palmer and W. Crumb, of Orleans, N.Y., for an "Improvement in horse pitchforks."

"We claim in a horse pitchfork, when composed of cross-bar shank and prongs that are rigidly connected and suspended for operation by means of a brace as herein described, the bow springing from the suspension brace, and connecting it with the shank as set forth, in combination with a mechanism located within the shank, whereby the bow may be locked or allowed to slide substantially as herein described."

No. 34,318. Addison Smith, of New York, N.Y., for an "Improvement in rotary blowers."

"I claim the employment or use for the purposes specified of the external case A, having induction and eduction openings *d*, *e*, in combination with the rotary cylinder B, when the latter is provided with radial sliding pistons C placed eccentrically within the case A, and has its pistons C operated or drawn in and out, so that their outer edges will be kept in contact with the inner surface of the body *b*, of the case A, through the medium of the segments F, I, and grooves *f*, *g*, either or both of the latter being stationary or rotating, substantially as described."

No. 34,319. C. M. Spencer, of South Manchester, Conn., for an "Improvement in breech-loading fire-arms."

"I claim, 1st, in combination with the breech C, and eccentric D, applied as described, I claim the hammer F, secured to the eccentric for the purpose of enabling the breech to be operated by the movements of the hammer substantially as herein specified. 2nd, in combination with the hammer F, eccentric D, and breech C, I claim the main spring or springs I, I, so applied in relation with a flattened portion *k*, of the hammer pin that the said spring or springs serve not only to produce the blow of the hammer, but to assist in operating the breech as herein set forth. 3rd, the cylindrical tumbler

G, so applied on an upright axis, and in combination with the hammer and trigger, as to allow the cock notch *j* to pass beyond the trigger, and the hammer to be thrown back for the operation of the breech beyond the position in which it is cocked, substantially as herein specified."

No. 34,320. Robert Spencer, of Brooklyn, N.Y., for an "Improved military or other riding saddles."

"I claim the cantels C, C, and front pieces D, D, when applied to or used in connection with the parts A, A, of the tree connected by the springs B, B, as and for the purpose specified."

No. 34,321. Geo. R. Stuntz, of Superior, Wis., for an "Improvement in anemometers."

"I claim, 1st, the combination of the system of pencils *a*, *a*, herein described, the vane D, and the endless apron F, or equivalent device, moved by clock work, for carrying a sheet of paper or other material on which the record of the direction of the wind is to be made, the whole arranged to operate substantially as herein described. 2nd, the employment of one or more prickers *p*, actuated by means of one or more springs *i*, and one or more pins *h*, deriving a rotary motion from a train of gearing driven by a wind-wheel attached to the vane; the whole operating substantially as herein described, for the purpose of recording upon the moving sheet of paper or other material the velocity of the wind."

No. 34,322. John G. Treadwell, of Albany, N.Y., for an "Improvement in cook stoves."

"I claim the employment of the plate *a* in connection with the ovens B, B, arranged as set forth, whereby two separate drafts of air are formed, one upon each side of the ovens, for equalizing the heat substantially as above set forth."

No. 34,323. John G. Treadwell and Wm. Hailes, of Albany, N.Y., for an "Improvement in parlor hot-air stoves."

"We claim the employment of the damper K, constructed and arranged in the manner and for the purpose specified. 2nd, the combination of the damper K, constructed and arranged as specified, with the cross pipe G and pipe F, as and for the purpose set forth."

No. 34,324. Herbert W. C. Twedle, of Pittsburg, Pa.. for an "Improved apparatus for distilling coal, oil, and other substances."

"First, I claim the vacuum apparatus R, with which, by the use of steam, I produce a vacuum. Second, the use of the vacuum apparatus R, arranged substantially as described, in combination with the receivers L and M, or their equivalents. Third, the use of the vacuum apparatus R, in combination with the steam pipe F, arranged in the interior of the still, substantially as described."

No. 34,325. George W. White, of New York, N.Y., for an "Improvement in breech-loading firearms."

"I claim opening and closing the rear end of the barrel by means of a plug which has both a revolving and a sliding motion, substantially in the manner set forth."

No. 34,326. John Armstrong, of Philadelphia, Pa., assignor to R. T. Kensil and Co., of same place, for an "Apparatus for drying pasted envelopes."

"I claim the drum or pulley A, its endless band E, and the endless tapes K, the whole being arranged and operating substantially as set forth, in combination with the fan or its equivalent, for the purpose specified."

No. 34,327. F. B. Fournier, of Berea, Ohio, assignor to himself and Robert Wallace, of same place, for an "Improved drain roller and moulder combined."

"I claim the combination of the rollers B and G with the enlargement *b*, when arranged in combination with the frame work, so as to operate in the manner and for the purpose set forth, I also claim, in combination therewith, the plough D, in the manner and for the purpose specified."

No. 34,328. Edward D. Gird, of Cedar Lake, N.Y and R. Gird, of Healdsburgh, California, assignor to themselves and Thos. J. Bedwell, of Healdsburgh, Cal., for an "Improved budding knife."

"We claim, 1st, the employment or use of the blade B, provided with one or more curved portions *b*, substantially as shown, for the purpose of cutting the buds from the limbs. 2nd, a blade provided with spur *d* at its end, substantially as shown, for the purpose of making the T-shaped incision in the side of the stock to receive the bud. 3rd, the combination of the blades B, C, constructed substantially as shown, and fitted in a suitable handle, the whole forming a new and useful implement for the purpose specified."

No. 34,329. Herrmann Grundt, of Berlin, Prussia, assignor to Hess, Kessell and Co., of New York, for an "Improved iron pontoon."

"I claim, first, the arrangement and construction of iron pontoons in sections, when said sections are provided at their ends with a flanch or angle iron, corresponding with a flanch or angle iron on another and adjoining section, the whole being arranged in the manner and for the purpose substantially as described. Second, I claim the use of an opening in one or both the end sections K and L, in a pontoon constructed as above described, closed by a door or doors, in the manner and for the purpose substantially as specified."

No. 34,330. Ezekiel M. Hendrickson, of Brooklyn, N.Y., assignor to himself, James H. Prentice, and Job W. Blackham, of same place, for an "Improvement in sewing machines."

"I claim, first, the transversely reciprocating frame or plate K, in combination with a clamp or presser foot carried thereon, and adapted to compel the fabric to reciprocate transversely therewith, and to allow it to be fed longitudinally through or upon the same, substantially as and for the purpose herein set forth. Second, I claim mounting the longitudinal feeding device N, N^1, or its equivalent, on the cross feed reciprocating plate K, so that each shall perform its proper function independently of the other, substantially as and for the purpose above described. Third, I claim the clamp or presser foot U, *u*, so arranged in connection with the curved edge of the plate K as to hold the junction of the rim and body of a hat with an adjustable force in the line of the stitches, and to yield to the varying thickness of the stuff, substantially as herein set forth. Fourth, I claim the combination of the hinges u^{11}, and *v*, and springs u^{111}, and v^1, with the guide or presser foot U, for the purpose of allowing the said guide or presser foot to be folded back out of the way when changing the hat, and be again readily placed in position, substantially as herein described."

No. 34,331. William H. Place, of New York, N.Y., assignor to himself and George Hayward, of same place, for an "Improved blast generator."

"I claim as an improvement on A. F. W. Partz's hydraulic blast generator, patented June 2nd, 1857, 1st, the arrangement of rings A, A, B, B, with the shaft D, and fearing F. 2nd, the combination of valve V, or its equivalent, with the valve chamber G, as and for the purpose described."

No. 34,332. Christian Reichman, of Philadelphia, Pa., assignor to Gustav Wedekind, of same place, for an "Improved clasp for lamp shades."

"I claim the clasp composed of the metal ring D, having lips *f* and *h* formed by cutting the lower portion of the ring, and any convenient number of springs *m* and *n*, or their equivalents, the whole being constructed and arranged for attachment to the shade and chimney of a lamp, substantially as set forth."

No. 34,333. S. H. Roper, of Boston, Mass., assignor to Elmer Townsend, of same place, for an "Improvement in hot-air engines."

"I claim, 1st, the employment of a current of air forced in between the prolongation of the piston and the cylinder in a direction counter to that entering from the fire box, for the purpose described. 2nd, I claim the air space within the piston, in combination with the double-acting pumps and hollow pistons for pumping cool air therein and therefrom, for the purpose of preserving the packing cool, as set forth. 3rd, I claim regulating the engine by exhausting the air from the fire box by means of a governor, as set forth. 4th, I claim placing the force pumps upon the top of the cylinder, and attaching the piston rods M directly to the main piston, for the purpose described."

No. 34,334. Joseph F. Sargent, of Boston, Mass., assignor to Elmer Townsend, of same place, for an "Improvement in machinery for rolling metal for shoe tacks."

"I claim the combination of the guides F, F, and the lips *f*, *f*, or mechanical equivalents therefor, with the upsetting flanges and the reducing rollers bevelled in opposite directions, substantially as explained."

No. 34,335. Joseph F. Sargent, of Boston, Mass., assignor to Elmer Townsend, of same place, for an "Improvement in machines for pegging boots and shoes."

"I claim as a new machine the combination of the mechanism for operating the awl, peg driver, and for feeding the work, with the mechanism for cutting and feeding the pegwood, all being arranged compactly in the frame A, or its equivalent, and operated by the cams and levers, arranged substantially as and for the purposes described. I also claim the pendulum or swing piece H, having the awl and peg driver carrier L, the throat piece *b*, the peg box W, the pointing mechanism and pegwood feeder, arranged and applied thereto or connected therewith, as set forth, in combination with so applying such pendulum to a 'quill' or sleeve F, disposed on the driving shaft B (or on a stud or arm arranged just above or below the same), that the whole may be caused to operate together in manner and for the purpose set forth. I also claim combing and arranging with a vibrating pegbox and pegwood feeder, constructed as described, a stationary knife, whereby the pegs are severed from the peg strip, in manner as set forth. I do not claim transferring the contact between the sole of the boot or shoe and a stationary rest to a vertical moving block or awl stock while the said boot or shoe is moved forward in manner as described and shown in Letters Patent, No. 28,852; but what I do claim is, so constructing and applying the throat piece or block to the pendulum H, as to have no vertical movement, in combination with so forming and applying the retainer that it may have a short vertical movement, whereby the two are made to operate together in manner as set forth."

No. 34,336. Charles E. Sweney, of Charlestown, Mass., assignor to himself and Wm. H. Hooton, of same place, for an "Improvement in knapsacks."

"I claim suspending the knapsack A on the frames B, or their equivalents, so that an air space may intervene between the knapsack and the back of the wearer, substantially as described, and for the purpose set forth. 2nd, I claim the shoulder pads C, in combination with the frame B, for the purpose specified."

No. 34,337. Philip Ulmer, of Philadelphia, Pa., assignor to himself, L. H. Worman and Jos. O. Ely, of same place, for an "Improved construction of knife and fork."

"I claim constructing the handles of table knives and forks of sheet metal, shaped so as to be wholly closed and hollow, combined with the knife blade or fork lines formed of sheet steel, substantially as and for the purpose herein specified."

No. 34,338. Philip Ulmer, of Philadelphia, Pa., assignor to himself, L. H. Worman, and Jos. O. Ely, of same place, for an "Improved camp spoon."

"I claim a spoon formed substantially as herein specified, so as to case with a knife and fork, as set forth."

No. 34,339. Geo. W. Walker, of Boston, Mass., assignor to himself and Jno. Mager, of Lawrence, Mass., for an "Improvement in steak broiler."

"I claim my improved steak boiler having its several parts constructed and arranged in relation to each other, and so as to operate in manner as set forth."

No. 34,340. Geo. L. Witsil, of Philadelphia, Pa., assignor to himself and Levi S. Hacker, of same place, for an "Improved washing machine."

"I claim the frame with its vibrating ribbed blocks D, horizontal bar E, and lever F, in combination with the vessel A and its permanent ribs *b*, the whole being arranged and operated as and for the purpose herein set forth."

No. 34,341. Benjamin B. Lewis, of Bristol, Conn., for an "Improvement in calendar clocks."

"I claim, first, arranging the month wheel F, and the year wheel D, to turn upon the same centre in combination with the indicating pointers that point to the numerical day of the month and the month of the year depicted on the face of the time dial as a distinct attachment or device for a clock, substantially as and for the purpose described. Second, I claim the gears *q*, *c*, cam *r*, plate *s*, combined with the wheels E, F, arranged and operating substantially in the manner and for the purpose described. Third, I claim the hinged and pivoted click lever I, in combination with the guard *e*, gear B, arranged to communicate motion once in every twenty-four hours from the centre or time spindle A, or gear *a*, to the wheel F, and at the same time to adjust itself to show on the face of a dial through an indicating pointer *k*, the day or number of days in each of the months, substantially as described."

Re-issues.

No. 1268. Ethen Allen, of Worcester, Mass., for an "Improvement in revolving fire-arms."—Patented 3rd July, 1860.

"I claim the combination of a revolving cylinder having its chambers extending entirely through the block with an unbroken recoil shield having a projection on its face as described and for the purpose set forth. And I also claim in the said combination as described the making of the said projection on the recoil plate in the form of an inclined plane substantially as and for the purpose specified."

No. 1269. Gustavus Finken, of Brooklyn, New York, for an "Improvement in apparatus for manufacturing cube sugar."—Patented 20th August, 1861.

"I claim the formation of the cubes from the granular sugar in the manufacture of cube sugar by means of machinery composed of an endless or rotating series of moulds filled with compressing and discharging pistons, and having applied in combination with them a cam or cams, or their equivalent, for operating the pistons one or more at a time in regular succession throughout the whole of the series, substantially as herein specified."

No. 1270. John J. Haley, of South Dedham, Mass., for "Improved rollers for wringing machines."—Patented 14th January, 1862.

"I claim the connecting or uniting of india-rubber rollers to metallic shafts by the means and in the manner hereinbefore described."

No. 1271. Henry Steinway, jr., of New York, N.Y., for an "Improvement in pianoforte actions."—Patented 15th June, 1858.

"I claim the repeating lever *e* attached to an arm *j* at the back of the jack, and arranged relatively to the hammer, and operating under the control of a spring, substantially as herein described for the purpose set forth. And I also claim the employment, in combination with the so-applied repeating lever, of a screw *k* applied to operate substantially as and for the purpose set forth."

No. 1272. Daniel Treadwell, of Cambridge, Mass., for an "Improvement in the manufacture of cannon."—Patented 11th December, 1855.

"I claim, 1st, in making a cannon consisting of a body (in which the caliber is formed), the walls of which are of one piece surrounded by rings, hoops, or tubes, in one or more layers placed upon said body under great strain, by which said body is compressed, and the natural equilibrium of the molecules or particles of which it is composed disturbed, by their being brought nearer together; and this is accomplished in the manner herein set forth, namely, by making the hoops smaller than the part which they are to surround, and then expanding them by heat, and then suffering them to shrink or contract after having been put in their places. 2nd, I also claim the method of securing the hoops to the body of the gun, and the several layers of hoops to each other, by screw threads when they shrink to their places as above described."

Designs.

No. 1521. John Dean and Saml. P. Emerson, of Worcester, Mass., for a "Design for a photograph preserver."

No. 1522. Simeon Hayes, of Prattsburgh, N.Y., for a "Design for trellis frame."

No. 1523. Charles J. Shepard, of New York, N.Y., for a "Design for a stove."

List of Patents, with claims annexed, issued from the United States Patent Office for the week ending 11th February 1862, each bearing that date.

No. 34,342. Nathaniel Adams, of Cornwall, N.Y., for an "Improvement in running gear of carriages.

"I claim the arrangement of the arm *c*, perch *f*, and pivot *e*, with the independently pivoted axles A, B, as herein shown and described, for the purpose set forth."

No. 34,343. C. M. Alexander, of Washington, D.C., for an "Improvement in bridle bit attachments."

"I claim the arrangement of the looped wires L, L, passing through the springs, when used in combination with the shank A, strap F, and bridle-rein H, as and for the herein specified.

No. 34,344. J. Lewis Baldwin, of Newark, N.J., for an "Improvement in moulds for making daguerreotype cases."

"First, I claim the combination with the upper portion of the die C, frame or block A, and lower parts of the die or mould of the plunger D, substantially as described. Second, the combination with the parts C and D of the key *g*, so as to accomplish the purpose set forth. Third, constructing the part C, with two thread portions or screws of equal pitch, one of which fits into the block A, and the other of which forms the screw upon the work, substantially as and for the purpose set forth."

No. 34,345. J. S. and T. B. Atterbury and James Reddick, of Pittsburg, Pa., for an "Improvement in the manufacture of hollow glass ware."

"We claim, 1st, the manufacture of lamp pegs, or bowls, and other descriptions of hollow glass ware, with the ornamental designs or figures, intermediate the inner and outer plain surfaces of the glass of which the articles are composed, substantially in the manner described. 2nd, while not claiming the plan of a mould made with a lower section and two upper sections hinged together, and to the lower section, we do claim the performance within a sectional mould, such as we have shown, of the pressing and blowing process successively, in the production of one and and the same hollow article of glass ware, substantially as and for the purposes set forth."

No. 34,346. Samuel Bentz, of Carrol co., Maryland, for an "Improved hulling machine."

"First, I claim the employment of a conveyer trough substantially as herein described, with flights as herein specified for moistening the grain, and, in combination with the conveyer, the regulated water discharge, as and for the purposes set forth. Secondly, I claim the employment of an unbranner for removing the husk or bran from edible grain in a moist state, consisting of a horizontal cylinder, with inclined revolving wings, constructed substantially as and for the purposes set forth. Thirdly, I claim, in combination with a moistening apparatus and unbranner, the drying apparatus through which the grain is passed to be dried. Fourthly, I claim the construction of the drying apparatus, with its partitions, &c., by which the air is compelled to commingle with the grain (either alone or in company with the detached bran or husk), as herein specified. Fifthly, I claim polishing the grain after it has been dried, by passing it through an unbranning apparatus as described. Sixthly, I claim removing the bran, either in a moist or dry state, from one or all the points, while passing through the apparatus, by means of exhaust apparatus applied substantially as and for the purpose herein set forth. Seventhly, I claim regulating and controlling the current of air through the dryer, by means of the exhaust, as and for the purposes described. Eighthly, I also claim the apparatus for cooling the grain, constructed and arranged as herein set forth."

No. 34,347. John Buser, of New York, N.Y., for an "Improvement in bottling apparatus."

"I claim the revolving holder *k*, with the receptacles (9) for the bottles, in combination with the cross head *m*, and parts attached, for filling and corking said bottles as presented by the said revolving holder *k* as set forth. Second, I claim the arrangement of the sliding bar *i*, talon 7, spring 6, and lever *h*, when combined with the revolving holder *k*, for giving motion to the said holder, and presenting the bottles to be filled in unison with the other movements of the machine as specified. Third, I claim the lever *p*, in combination with the cross heads *m* and *c*, and acting in the manner specified to turn the yoke 10 over the cork as the cross head *m* is raised, as specified. Fourth, I claim the vessel *r*, spout *s*, and tipping dipper *t*, in combination with the revolving holder *k*, and corking apparatus, for supplying syrup or other liquid to the bottles in said holder *k*, immediately prior to the corking, as set forth.

No. 34,348. Nelson W. Clark, of Clarke ton, Michigan, for an "Improvement in apparatus for the manufacture of salt."

"First, I claim, in combination with the salt block, a heating reservoir in and through which there is a constant flow of water, substantially as described, I also claim, in combination with a steam boiler placed over the furnace of the salt block, a heating reservoir F, placed over and projecting beyond said boiler, for the purpose of utilizing the otherwise wasted heat from and around the boiler, substantially as described. I also claim projecting the sides or ends of the pans over the sides or main flue of the salt block, for the purpose of affording a table on which the salt drawn or scraped from the pans may drain, and allow the drainings to run back into the pans, substantially as described. I also claim making the salt pans of metal and of wood, so arranged and combined as that whilst the saline water shall lie upon both, the metal only shall be exposed to the fire or heated products of combustion, substantially as and for the purpose described. I also claim so arranging the flow-offs from one pan to the next adjacent one throughout the series, as that the metal portions of the pans shall be always covered by the saline water in them, and thus prevent corrosion of the pans, and consequent destruction, as well as avoiding the staining of the water or discoloring of the salt, as herein set forth and explained."

No. 34,349. Stillman A. Clemens, of Rockford, Illinois, for an "Improvement in hemp breakers."

"I claim, 1st, the method of breaking flax or other fibrous substances by a beater constructed substantially as described, which oscillates upon an axis on one side of its centre, and has its breaking edges on the other side extending at unequal distances from the axis, when combined with two bars the breaking edges of which are in correspondence with those of the beater, substantially as described, and for the purposes specified. Second, I also claim a whipper vibrating either upon an independent axis one side, or upon an axis common to it and the beater, when combined with a beater or pair of feed rollers, substantially as described, and for the purpose specified. Third, I also claim an air pipe j^1, with its discharging spout, so arranged as to direct an artificial current of air across the machine above the whipper in connection with the latter, substantially as described, and for the purpose specified. Fourth, and I also claim an annular grooved receiving roller *d*, resting over or upon an endless apron, and in connection with a pair of plain pressing feed rollers, substantially as described, and for the purpose specified."

No. 34,350. Isaac Crandal, of Middlefield, N.Y., for an "Improvement in pleasure wagons."

"I claim forming the body A of the vehicle of two elastic parts *a*, *a*, attached one part to the back axle C, and the other by a king bolt *b* to a spring E, which is fitted or suspended between the back parts of the thills F, the latter being attached permanently to the front axle G, and all arranged as and for the purpose set forth."

No. 34,351. R. A. Daniels, of Wayne, Ohio, for an "Improvement in fasteners for hames."

"I claim the employment of the hook A and catch C, in combination with the notched bar F, and hook D as shown, for the purpose herein set forth and described."

No. 34,352. Rudolph Dirks, of Philadelphia, Pa., for an improvement in sash springs."

"I claim the spring G, composed of one piece of wire, bent, attached to the sash, and arranged in respect to the grooves of the frame, as and for the purpose herein set forth."

No. 34,353. William H. Doane, of Chicago Illinois, for an "Improvement in bed plate of stave machines."

"I claim a stave machine bed plate A with a gutter B, and incline scarf notches *a*, *a*, in combination with a loosely fitted wood or yielding strip D, and an adjusting bar C, with inclined scarf notches *c* on its under side, substantially in the manner and for the purpose herein described."

No. 34,354. O. D. Eckerson and C. Watson, of Middleburgh, N.Y., for an "Improvement in water elevators."

"I claim the combination of the pin *s* with the flanged drum F, groove *u*, and cavities V, when arranged to operate in the manner and for the purpose described."

No. 34,355. Thaddeus Fairbanks, of St. Johnsbury, Vermont, for an "Improvement in weighing apparatus."

"I claim the combination and arrangement of the rotary check and its latching mechanism with the scale beam and its loop in manner and so as to operate substantially as specified."

No. 34,356. John Fasig, of West Salem, Ohio, for an "Improvement in hay knives."

"I claim the friction roller E in combination with the blade A, constructed and operating as and for the purpose set forth. 2nd, I claim the auxiliary handle C in combination with rods B, blade A, and roller E, constructed, arranged, and operating as described."

No. 34,357. Warren L. Fish, of Newark, N.J., for an "Improvement in guides for creasing tucks and plaits preparatory to sewing."

"I claim the combination of the rollers B, D, with the adjustable guide E and roller C, as and for the purpose herein shown and described."

No. 34,358. Thaddeus Fowler, of Richmond Valley, N.Y., for "Improved deck-ballast boxes for vessels."

"I claim the shaft *f*, pinion *g*, and handle *i*, in combination with the caster wheel *c*, as and for the purposes specified."

No. 34,359. Richard C. Glyde, of Pittsburgh, Pa., for an "Improvement in vessels for transportation of carbon and other oils."

"I claim the use for the transportation of oil in bulk of boats divided by partitions into separate compartments, substantially in the manner herein-before described. Also the use for the transportation of oil in bulk of boats divided into compartments, covered over with deck heads in the manner substantially as herein-before described."

No. 34,360. John W. Griffiths, of Brooklyn, N.Y., for an "Improvement in ship building."

"I claim the projecting bilge strakes or keelsons on the outside of ships and other navigable vessels, forming rectangular channel ways, substantially as and for the purposes herein described."

No. 34,361. R. H. Hall, of Owego, N.Y., for an "Improvement in axles for wheel vehicles."

"I claim the combination with the axle A, *a*, of the upper casings *b*, *b*, lower casing *c*, strip *d*, central threaded bolts *f*, *f*, keys *g*, *g*, and bands C, D, all constructed, arranged, and applied in the manner and for the purposes herein-before shown and explained."

No. 34,362. Newton S. Harryman, of Frankfort, Indiana, for an "Improvement in cultivators."

"I claim the combination of the several parts constructed and arranged as described; to wit, the bar G, pivoted to the top of the rear standards, the frame F, and standards E, E, with the draught frame, all substantially as shown in the drawings."

No. 34,363. Isaac Hayden, of Lawrence, Mass., for an "Improvement in machinery for cleaning cotton."

"I claim connecting two or more or a series of machines for working cotton and other fibrous substances, by means of trunks provided with woven screens and cells, substantially as described, so as to make each machine supply or feed the next machine to it through said trunk, substantially in the manner set forth. I claim in machinery or apparatus for cleaning cotton and other fibrous substances a trough or trunk, which is so bent or curved as to carry one part of said trunk over or under or by the side of the other part of the trunk, so as to obtain a greater length of trunk and a greater area of screening surface than could otherwise be effected in a room of a given size."

No. 34,364. William L. Hawkins, of Lock Haven, Pa., for an "Improvement in stump extractors."

"First, I claim a suspended or yielding frame C, having upon its opposite sides rack bars D, the steps 1, 2, 3, &c., of which not only recede from each other, but also increase in length or height as they rise, substantially as and for the purpose set forth. I also claim, in combination with a lever that is to work in said rack bars, the spring adjusting fulera so connected together as to mutually tend to hold each other to the steps, substantially as described. I also claim in combination with the rack bars and lever, and their operative appliances, the slots or grooves *c* in said bars, and the guide pins in said lever, for controlling the lever as it rises or descends, substantially as described."

No. 34,365. Loring P. Hawes, New York, N.Y., for an "Improvement in machines for cutting veneers."

"First, I claim the combination of the adjustable slotted plates *k*, slides *i*, and eccentric I, with the bar C, bed L, and knife V, as herein shown and described. Second, the arrangement of the screw X, connected with the carriage T, and provided with the circular plate Y, having the arms a^1, d^1, attached, the former being provided with the segment rack b^1, and the latter fitted between the stops e^1, e^1, in connection with the ratchet A^1, also fitted on screw X, and the arm g^1, having the pawl h^1 attached, and fitted on a collar of plate Y, all being arranged in relation with each other, and operated from the shaft Z, substantially as and for the purpose set forth. Third, the arrangement, as shown and described, of the screws N, Q, with the nuts O, R, and dogs P, S, for the purpose of dogging the bolt to the bed L."

No. 34,366. Charles W. Held, of Brooklyn, N.Y., for an "Improved enamel for leather."

"I claim a lacquer for enamelling leather, &c., composed of the within named ingredients, mixed together in about the proportion herein set forth."

No. 34,367. Julius Hotchkiss, of Middleton, Conn., for an "Improvement in skin cartridge."

"I claim in making a cartridge, so disposing the fillet or gut of which it is composed, that the fibres of one portion of the gut shall transversely or spirally cross the fibres of another portion of the gut, substantially as described."

No. 34,368. Reuben Hurd, of Spring Hill, Illinois, for an "Improved device for cutting the noses of swine to prevent them from rooting."

"I claim an improvement or device formed of the levers A, B, provided respectively with the cutter C, and block D, arranged to operate as and for the purpose herein set forth."

No. 34,369. Frank G. Johnson, of Brooklyn, N.Y., for an "Improvement in velocipede ice boots."

"First, I claim the combination of the runners L, L, M, and the spurred wheel E, attached to and combined with a suitable body, to be used as an ice velocipede, to be propelled by the feet or hands, substantially in the manner set forth. Second, the springs *g*, *g*, or their equivalents, in combination with the shaft F, F, and spurred wheel E, substantially in the manner and for the purposes described. Third, the discs *a*, *a*, *a*, *a*, combined with the periphery of the wheel E, and the spurs *e*, *e*, substantially in the manner and for the purposes set forth. Fourth, the peculiar arrangement of the suspension rods *j*, *j*, *j*, *j*, and the connecting rods *c*, *c*, *c*, *c*, with the treadles *h*, *h*, *h*, *h*, by which a person is enabled to sit on the seat S, and exert great force upon the wheel E, for the purpose described."

No. 34,370. Moses Marshall, of Lowell, Mass., for an "Improvement in machines for pegging boots and shoes."

"I claim the intermittent automatic peg feed, operating as the plunger descends, in combination with the splitting knife operating as the plunger ascends, substantially in the manner and for the purpose described. 2nd, I claim a splitting knife, so constructed and arranged as to split off the peg, and force it under the peg driver while the latter is up. 3rd, I claim the bar *q*, operating as described, in combination with the pawls *b*."

No. 34,371. James R. Mason, of Elgin, Illinois, for an "Improvement in ploughs."

"I claim constructing the main brace *f*, with a land-side termination *d*, and cup *v*, and ream socket v^2, in combination

with the land side B, cutter blade C, and its base enlarged axle *g*, the whole arranged and operating substantially in the manner and for the purpose set forth."

No. 34,372. Gordon McNeil, of Chesnut Hill, Pa., for an "Improved clothes dryer."

"First, I claim the combination of the bars A, A^1, extension bars D, D^1, strips B, C, and thumb screws *d*, when arranged to operate in the manner and for the purpose set forth. Second, the manner of arranging the drying bars E, in the bars A, A^1, so as to spread apart at their outer ends, in combination with the set screws *c*, for securing the same, substantially as described."

No. 34,373. Jacob Reese, of Pitsburgh, Pa., for an "Improvement in oil tanks."

"I claim constructing tanks or other vessels for holding coal and carbon oil, or other light oils, with an outer casing around the sides of the oil vessel, so as to leave a space between the casing and the oil receptacle for the purpose of surrounding it with water, substantially in the manner and for the purpose herein-before set forth. Also, so constructing the outer casing of oil tanks having double sides forming a water space around the tank as that the upper edge of the outer casing shall be higher than the level of the top of the main tank, for the purpose of allowing the oil leaking through the walls of the tank to return itself thereto, in the manner herein-before described."

No. 34,374. Orrin Newton, of Pittsburgh, Pa., for an "Improvement in dies for manufacturing brass kettles."

"I claim the use in the manufacture of brass kettles and other articles of hollow ware from sheet metal of plungers, around which the metal is worked, so constructed as to contract when the plunger is withdrawn, in combination with annular dies, for the purpose of drawing out the metallic sheets into the required shape, substantially in the manner and for the purposes herein-before set forth. Also the combination of a conical centre piece *c*, and corresponding side pieces *c*, *e*, c^1, e^1, and bottom piece *g*, to form a plunger for drawing or pressing sheet metal in or through dies, so that the diameter of the plunger will contract to allow of its being easily withdrawn from the metal on which it is operating, or from the dies into or through which it was forced, substantially as described."

No. 34,375. John B. Root, of Battle Creek, Michigan, for an "Improved rotary engine."

"I claim, 1st, the packing rings G, N, G, N, constructed with offsets, and applied and arranged within the cylinder heads, and in combination with the drums C, piston packing *e*, *e*, and cylinder abutment *g*, substantially as and for the purpose herein specified. 2nd, the combination with a packing ring G, abutment piece *g*, or other packing piece of V form, or having bevelled edges as described of triangular or wedge-shaped packing pieces *n*, *n*, or *t*, *t*, a follower *p* or *k*, and springs *r* or *l*, the whole arranged and operating substantially as herein specified. 3d, the packing pieces *s*, *s*, applied in combination with the segment pieces *d*, *d*, and with proper provision for the admission of steam behind them, substantially as and for the purpose herein specified."

No. 34,376. John B. Root, of Battle Creek, Michigan, for an "Improved rotary engine."

"I claim the combination of the rings *a*, *a*, attached to the pistons and the hubs *c*, *c*, projecting inward from the cylinder heads in positions eccentric to the shaft and piston drum but concentric with the cylinder, substantially as herein specified. 2nd, the cylinder heads B, B, constructed with rebates and fitted to the cylinder and to rebates in rings G, G, or flanges secured to or formed on or in the cylinder substantially as and for the purpose herein described. 3rd, the steam jacket H, H^1, with its two compartments communicating with the cylinder ports *l*, l^1, its partition *k*, passages *m*, m^1, and valve I, all constructed and arranged and operating substantially as herein set forth. 4th, the two ports n^1, n^1, and valves *p*, p^1, combined with the cylinder and steam jacket H, H^1, substantially as and for the purpose herein described. 5th, the linings *b*, *b*, applied in combination with the rings *a*, *a*, of the pistons and the hubs *c*, *c*, of the cylinder heads, substantially as and for the purpose herein specified."

No. 34,377. Alba F. Smith, of Norwich, Conn., for an "Improvement in trucks for locomotives."

"I claim the employment in a locomotive engine of a truck or pilot wheels fitted with the pendent links *o*, *o*, to allow of lateral motion to the engine as specified, whereby the drivers of said engine are allowed to remain correctly on the track in consequence of the lateral motion of the truck allowed for by said pendent links when running on a curve as set forth."

No. 34,378. Edward Spencer, of St. Louis, Missouri, for a "Railroad ticket stamp."

"I claim combining the rollers *e*, *c*, the die *d*, and the ribbon *f*, *f*, with the jaws of the pincers, substantially in the manner described, for the purpose specified."

No. 34,379. William O. Strong, of Detroit, Michigan, for an "Improved device for distributing grain in elevator bins."

"I claim the even distribution of grain in bins by means of the pipes E, F, made either telescopic or fixed, and the truncated cones G, G, G, or their equivalents, arranged substantially in the manner and for the purpose set forth."

No. 34,380. Levi U. Stuart, of Brooklyn, N.Y., for an "Improvement in bellows."

"I claim the arrangement of a reservoir C, or its equivalent, with a movable part *c*, in combination with an ordinary bellows A, and connecting with the same by an air trunk D, or its equivalent, as herein-before described, and so arranged that the force or power of the said movable part *c* is transmitted to the bellows, and made to act upon the same as an additional pressure."

No. 34,381. Samuel T. Thomas, of Laconia, N.H., for an "Improvement in fancy looms."

"I claim, 1st, the mode of partially overcoming the momentum of the lay by means of the inclined plane bent lever 2, 2, brake and flange, or their equivalents, previous to the final arrest of the dagger by a fixed stop. 2nd, I claim the mode of elevating the shuttle box levers by means of the slide wedges traversing in single or double guides, and operated by the draw wires and series of connected levers, combined with the series of star cams and ratchet, acting on one or both sides of the loom, as set forth. 3rd, I claim the combined action of two or more wedges or inclined planes one above the other, for elevating the shuttle box, by means of which the extreme distance traversed by the box is about equal to the sum of the height of the large ends of the wedges. Fourth, I claim the arresting or governing of the feed or take-up motion that operates the cloth beam, by means of the action of the reed and flighter, the cloth beam and flighter being connected by the lever 315, slide 313, pawl 314, and ratchet 431, or their equivalents, as herein described."

No. 34,382. W. H. Thompson, of Cleveland, Ohio, for an "Improvement in railroad switch."

"I claim the stand A, signal post I, slotted arm M, placed beneath the base A, and stud N upon the switch bar B, when these several parts are arranged, constructed, and operated as and for the purpose set forth."

No. 34,383. James Vincent and Saml. Leslie, of Quasqueton, Iowa, for an "Improvement in churns."

"I claim the double comb breaker F, H, and cap E, with the vessel J, and revolving platform B, combined and operating in the manner substantially as described."

No. 34,384. Milan Waterbury, of Polo, Illinois, for an "Improvement in car coupling."

"I claim so combining the hooks or catches E, E, with the spring buffers *c*, *c*, as that whilst they move longitudinally with the buffers they may have a lateral motion independent of them, substantially as and for the purpose described."

No. 34,385. Isaac S. Williams, of Philadelphia, Pa., for an "Improvement in camp stoves."

"I claim the outer casing A, the inner casing D, the latter being composed of two pieces hinged to each other, as set forth, in combination with the cover E, its upper flange *i*, and lower flange *e*, the whole being constructed and arranged as set forth, for the purpose specified. 2nd, the shelf G and the plates N and H^1, with their hooked ends and projections *m*, the whole being constructed and arranged for suspension to the flange *i* of the cover, as and for the purposes herein set forth."

No. 34,386. R. P. Wilson, of Cleveland, Ohio, for an "Improved washing machine."

"I claim the semi-spherical protuberances D, and corrugated convex rubber C, with the air-tight cylinder or barrel A, arranged to revolve in the direction of its length, when combined, arranged, and operating in the manner described."

No. 34,387. Benj. W. Wooster, of Albany, New York, for an "Improvement in handles for coffins."

"I claim the combination of the handle H, and its loop E, constructed as described, with the ornamental plate P, for the purposes set forth in the within specification."

No. 34,388. David Yeakel, of Lafayette, Indiana, for an "Improvement in breech-loading ordnance."

"I claim the combination and arrangement of the hinged screw cap E, shaft D, hoop *e*, ratchet *h*, stop L, and breech A, constructed and operated substantially as described."

No. 34,389. Stephen R. Andres, of Troy, N.Y., and Samuel Andres, and McDonough Bucklin, New York, N.Y., for an "Improvement in articles of food made of sweet potatoes."

"We claim desiccated cooked sweet potatoes as a new article of manufacture, made as described, or in any equivalent way."

No. 34,390. Thomas J. Barron, of Brooklyn, N.Y., assignor to James Horner, of New York City, for an "Improvement in lamps."

"I claim the employment or use, in a lamp for burning coal oils or other similar hydro-carbons, of a wick tube D, constructed of glass or burnt clay, as and for the purpose specified. I further claim having the tube D constructed with a contracted orifice *a*, as and for the purpose set forth."

No. 34,391. Wm. Henry Buckland, of Glamorgan Co., Great Britain, assignor to Emory Rider, of New York City, for an "Improved mode of preparing peat."—Ante-dated 30th September, 1859.

"I claim separating the decomposed from the fibrous or undecomposed portions of the peat by straining or keeping back the latter while the decomposed portions of the peat are forced through the perforated sides of the straining vessel or receptacle, substantially in the manner and for the purpose herein specified."

No. 34,392. D. H. Chamberlain, of West Roxbury, Mass., assignor to himself and John Hartshorn, of Boston, Mass., for an "Improved apparatus for generating vapor."

"I claim, in combination with a reservoir for containing the fluid, and a generator for evaporating it, the endless belt D, and tubes L, for conveying the fluid to the generator, substantially as described. 2nd, I claim the generator B, with its partitions *b*, in combination with the cylinder C, and its covered plates *a*, substantially as set forth. 3rd, I claim the reservoir G, in combination with the cylinder K, substantially as specified."

No. 34,393. James Clayton and Abraham Campbell, of Brooklyn, N.Y., assignors to Roots Rotary Steam Engine Co., of New York City, for an "Improved rotary engine."

"We claim, 1st, the hollow expanding metallic packing composed of rings or segments G, G, G*, G *, or strips P, P¹, constructed substantially as described, and applied between the cylinder heads and their packing rings behind the abutments, or in any other part of a rotary engine, to operate substantially as herein set forth. 2nd, the arrangement of the orifices in the segments G, G¹, G*, G¹*, with respect to the steam spaces of the cylinder, substantially as herein described and for the purpose set forth. 3rd, the arrangement of the two hollow expanding pieces *p*, *p*¹, for packing the abutment, one having communication with the cylinder on one, and the other on the other side of the abutment bearing, substantially as herein specified. 4th, the employment in combination with three or more pistons, and a steam jacket surrounding the cylinder of two eduction ports *n*, *n*¹, fitted with separate valves N, N¹, and a third eduction port *l*, under the reversing valve, the latter port to continue the eduction after the post *n* or *n*¹ is closed, substantially as herein specified."

No. 34,394. John Critcherson, of Boston, Mass., assignor to himself and Geo. P. Towle, of the same place, for an "Improved roller for clothes wringer."

"I claim as a new article of manufacture a roller for clothes wringers, consisting of disks of felt *c*, with interposed disks of thin metal *d*, arranged on a polygonal shaft A, and secured thereon in a compressed form by collars B, *b*, the whole operating in the manner and for the purpose substantially as described."

No. 34,395. Charles A. Cummings and Freeman M. Swallow, of Worcester, Mass., for an "Improved clothes wringer."

"We claim making the rolls self-adjustable by means of the straps and springs, when constructed and operating in the manner and for the purposes as above set forth and described."

No. 34,396. L. S. Fairchild, of Cleveland, Ohio, assignor to himself, Alonzo Hazen, Alonzo M. Hazen, of same place, and A. J. Whiting, of Perry, Ohio, for an "Improvement in shingle machines."

"I claim the intermittent screws O and P, gears M and N, cam R, dog S, and cam E¹, when arranged and operating substantially in the manner and for the purpose set forth. I also claim the lever V, spring J¹, segment gear U, in combination with the dog S, and cam E¹, and spring I¹, in the manner and for the purpose described."

No. 34,397. J. Loofoendahl, of Boston, Mass., assignor to himself and N. P. Lindergreen, of same place, for an "Improvement in spool holding devices."

"I claim the construction of the bracelet or wristband A, and hooks B and C, either or both, to form a new and useful implement or device, for the purpose herein set forth."

No. 34,398. John W. Wheeler, of Cleveland, Ohio, assignor to Henry H. Wheeler, of same place, for an "Improvement in water elevators."

"I claim a wheel or pulley, having a V-shaped channel upon its periphery, to receive the chain or rope, the inclined sides A of said channel being corrugated laterally, and the bottom *c* open, as and for the purpose described."

Re-issues.

No. 1273. Moses Marshall, of Lowell, Mass., for an "Improvement in pegging machines."—Patented 5th November, 1861.

"I claim a feeding point so arranged and operated so as to enter the hole previously made by the awl, and move the machine along for the purpose set forth."

No. 1274. David B. Rogers, of Alleghenny, Pa., for an "Improvement in cultivator teeth."—Patented 1st November, 1845.—Re-issued 20th September, 1859, and extended.

"1st, I claim making cultivator teeth entire of thin plate steel, the shank or upper part being bent or curved round in front, substantially as herein-before described, and for the purposes set forth, irrespective of the mode of attaching the tooth to the beam. 2nd, attaching cultivator teeth to the cultivator frame by inserting the upper end of the shank (curved round in front for that purpose), into a suitable hole in the beam, and driving a key or wedge into the cavity of the tooth, thereby pressing the shank against the sides and front of the hole in the beam, and thus securing it in its place."

No. 1275. Charles T. James, of Providence, R. I., for an "Improvement in projectiles."—Patented 26th February, 1856.—Re-issued 11th December, 1860.

"I claim combining with the body of the projectile an expansible packing, substantially as described, and capable of being expanded outwardly against the bore of the cannon, and into the floors thereof, if rifled, by the force of the exploding charge acting inside of such packing, substantially as described. I also claim connecting the expansible packing with the body of

the projectile by clips, which will not prevent the required expansion, and which will insure the rotation of the body of the projectile with such packing as described. I also claim making the outer surface of the packing of projectiles intended to be forced into contact with the bore of the cannon, and into the grooves thereof, of fibrous or textile or equivalent non-metallic substance, substantially as described."

DESIGNS.

No. 1524. JOHN EIBERWEISER and EDWARD KETTLER, of Cincinnati, Ohio, for a "Design for stove."

No. 1525. HENRY G. THOMPSON, of New York, N.Y., assignor to the Harford Carpet Co. of for "Thirteen designs for a carpet pattern."

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The following are in the press:—

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B. WOODCROFT.

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No. 858. TUESDAY, MARCH 25, 1862. Price 2d.

Applications for Letters Patent.

(21*st*, 22*nd*, *and* 24*th March*, 1862.)

782. Daniel Edwards Siebe, of Mason Street, Lambeth, in the county of Surrey, Engineer and Machinist, for an invention of "Improvements in machinery or apparatus for refrigerating or producing cold, part of which improvements are applicable also to other purposes."—Dated 21st March, 1862.

783. Robert Kay, of Castleton Print Works, Blue Pits, in the county of Lancaster, Calico Printer, for an invention of "Certain improvements in the method of printing calico and other surfaces, and in apparatus connected therewith."—Dated 21st March, 1862.

784. William Joseph Curtis, of 13, Tufnall Park Road, Holloway, Civil Engineer, for an invention of "An apparatus to ascertain and point out the fares and earnings or receipts of public vehicles and their conductors."—Dated 21st March, 1862.

785. James Newall, of Bury, in the county of Lancaster, Railway Carriage Builder, for an invention of "Improvements in supplying gas to railway carriages, stations, steamboats, and other vessels, omnibuses, or other carriages at any required pressure."—Dated 21st March, 1862.

786. John Matthias Hart, of 76, Cheapside, in the city of London, and Robert Lavender, of 332, Goswell Road, both in the county of Middlesex, for an invention of "Improvements in means for generating steam."—Dated 21st March, 1862.

787. James Fawcett, of Wakefield, in the county of York, Corn and Fulling Miller, for an invention of 'Improvements in the manufacture of soap, particularly applicable to the scouring, cleansing, and fulling of woollen or other cloths."—Dated 21st March, 1862.

788. James Humphrys, of Tower Hill, in the county of Middlesex, Engineer, for an invention of "Improvements in steam engines."—Dated 21st March, 1862.

789. Brownlow Hugh Mathew, of Saint James', in the county of Middlesex, Lieutenant Royal Bombay Engineers, for an invention of "Improvements in fire-arms and in cartridges."—Dated 21st March, 1862.

790. William Phelps, Manager for Henry Carey, of Nottingham, Lace Manufacturer, and William Roe Lymbery, also of Nottingham, Lace Maker, for an invention of "An improved woven fabric, and improvements in machinery for manufacturing the same."—Dated 21st March, 1862.

791. James Warbrick and William Warbrick, Machine Makers, and Alfred Travis, Foreman, all of Furnace Hill Iron Works, Dukinfield, in the county of Chester, for an invention of "Improvements in engines for carding cotton and other fibrous materials."—Dated 21st March, 1862.

792. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in sewing machines, which improvements are also partly applicable to other machinery for giving a rotating motion always in the same direction."—A communication to him from abroad by Mr. Charles Rhodes Goodwin, of 29, Boulevart St. Martin, Paris, Manufacturer.—Dated 21st March, 1862.

793. David Abercrombie, Mechanic, in the employment of Messieurs Alexander Paul and Company, of Glasgow, in the county of Lanark, North Britain, for an invention of "Improvements in power looms."—Dated 22nd March, 1862.

794. Thomas Marsh, of West Bromwich, in the county of Stafford, Hame Manufacturer, for an invention of "An improvement or improvements

in hames for horses and other draught animals." —Dated 22nd March, 1862.

795. Toni Fontenay, of Grenoble, France, Civil Engineer, for an invention of "Improvements in smoke consuming furnaces."—Dated 22nd March, 1862.

796. Evan Owen, of Bala, in the county of Merioneth, North Wales, Joiner, for an invention of "Certain improvements in the hydraulic engines known as 'Turbines.'"—Dated 22nd March, 1862.

797. Edward Lord, of Todmorden, in the county of York, Machine Maker, for an invention of "Improvements in certain machines for preparing cotton and other fibrous substances."— Dated 22nd March, 1862.

798. John Davis, of Kennington, in the county of Surrey, Band Master to the Civil Service Rifle Volunteers, for an invention of "Improvements in wind musical instruments."—Dated 22nd March, 1862.

799. Robertson Gladstone, of Court Hey, Broad Green, in the county of Lancaster, Merchant, for an invention of "Certain improvements in tilting or tipping waggons." — Dated 22nd March, 1862.

800. Frederick William Colls, of Deptford, in the county of Kent, and Peter Haden, of Hackney, in the county of Middlesex, for an invention of "Improvements in consuming smoke, and in the apparatus connected therewith."—Dated 22nd March, 1862.

801. Josiah Henry Tuck, of No. 35, Cannon Street, in the city of London, for an invention of "Improvements in the manufacture of flexible valves."—Dated 22nd March, 1862.

802. Joseph George Jennings, of Holland Street, Blackfriars Road, in the county of Surrey, for an invention of "Improvements in the manufacture of biscuits." — Dated 22nd March, 1862.

803. Thomas Mosdell Smith, of High Street, Kensington, in the county of Middlesex, for an invention of "Improvements in the manufacture of candles."—Dated 22nd March, 1862.

804. Thomas Frederick Hale, of the city of Bristol, Brass Founder, for an invention of "Improvements in valves."— Dated 22nd March, 1862.

805. William Holiday, of the Union Foundry, Bradford, in the county of York, Engineer, for an invention of "Improvements in the manufacture of press plates."— Dated 22nd March, 1862.

806. George Hartshorne the younger, and Daniel Grainger Ward, of Dudley, in the county of Worcester, Iron Merchants and Copartners, and William Woolley, of Tipton, in the county of Stafford, Boiler Maker, for an invention of "Improvements in punching or perforating metal plates or sheets, and in apparatus or machinery to be employed for that purpose."— Dated 22nd March, 1862.

807. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in kilns, ovens, and furnaces."— A communication to him from abroad by the Société Coignet, père et fils, et Compagnie, of 33, Boulevart Saint Martin, Paris, France.—Dated 22nd March, 1862.

808. John Henry Brierley, Beech Hill Mills, Halifax, in the county of York, for an invention of "An improved clasp or fastener for reversible belts, bands, or straps."— Dated 24th March, 1862.

809. John Clarke, of Shiffnal, in the county of Salop, Manufacturer, for an invention of "An improvement or improvements in carriage axles." —Dated 24th March, 1862.

810. Thomas White, of Birmingham, in the county of Warwick, Managing Clerk, for an invention of "Improvements in the manufacture and ornamentation of nut crackers and lobster crackers."—Dated 24th March, 1862.

811. Samuel Ellison Turner, of Birkenhead, in the county of Chester, for an invention of "An improved apparatus for burning a mixture of inflammable gas and air."—Dated 24th March, 1862.

812. Charles Marien Moullier, of Paris, in the French empire, Manufacturer, for an invention of "Improvements in flat cables or chains."— Dated 24th March, 1862.

813. Benjamin Fleet, of East Street, Walworth, in the county of Surrey, Soda Water Manufacturer, for an invention of "Improvements in apparatus for manufacturing and bottling soda water."—Dated 24th March, 1862.

814. John Topham, of the town and county of the town of Nottingham, Mechanist, for an invention of "Improvements in apparatus used for cleansing out the scum and removing the sediment from the water in steam boilers, and preventing incrustation therein." — Dated 24th March, 1862.

815. Edmund Morewood, of Stratford, in the county of Essex, and Andrew Whytock, of Little St. Andrew Street, St. Martin's Lane, in the county of Middlesex, for an invention of "Improvements in the process of coating metals, and in the apparatus employed."—Dated 24th March, 1862.

816. William Henson, of Great Alfred Street, Nottingham, in the county of Nottingham, Engineer, for an invention of "Improvements in knitting machinery."—Dated 24th March, 1862.

817. John Stewart, of Glasgow, in the county of Lanark, North Britain, Plumber, for an invention of "Improvements in the manufacture of cards for Jacquard weaving." — A communication to him from abroad by Louis Joseph Fillion, residing at Grongis, Aisne, France. — Dated 24th March, 1862.

818. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Certain improvements in machinery for the production of ornamental stitching or embroidery." — A communication from Paul Nicolas Legris, a person resident at Jallaucourt, canton of Delme, (département de la Meurthe,) in France.—Dated 24th March, 1862.

Notices to Proceed.

NOTICE is hereby given, that

2854. THOMAS PROCTER, of Boston, in the county of Lincoln, Millwright, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in carriers or stackers, or apparatus for facilitating the stacking of straw, hay, or agricultural produce."

2857. And CHARLES EDMUND WILSON, of Monkwell Street, in the city of London, Manufacturer, has given the like notice in respect of the invention of "A new article of female wearing apparel to be worn on the leg."

2861. And HENRY BIRD, of Liverpool, in the county of Lancaster, Chemist and Druggist, has given the like notice in respect of the invention of "Improvements in the construction of bottles and other vessels, and in stoppers for the same to indicate that they contain poison."

As set forth in their respective petitions, all recorded in the said office on the 13*th day of November,* 1861.

2869. And MONTAGUE WIGZELL, of the Strand, Topsham, in the county of Devon, has given the like notice in respect of the invention of "Improvements in machinery or apparatus to be used in moulding and casting twisted nails, spiral fluted rails, bolts and screws, for sheathing vessels, shipbuilding, building, and other purposes."

2870. And ROBERT HEATH, of 25, St. George's Place, Hyde Park Corner, in the county of Middlesex, has given the like notice in respect of the invention of "An improvement in umbrellas and parasols."

As set forth in their respective petitions, both recorded in the said office on the 14*th day of November,* 1861.

2881. And JAMES GRINT, of 45, Harrison Street, Gray's Inn Road, in the county of Middlesex, Engineer and Draughtsman, has given the like notice in respect of the invention of "Improvements in pegs, nails, or like fastenings, for uniting the soles of boots and shoes and other substances."

2884. And MATTHEW GIBSON, of Saint Andrew's Works, Gallowgate, Newcastle-on-Tyne, has given the like notice in respect of the invention of "Improvements in reaping and mowing machines."

2886. And DAVID STEWART, of Newcastle-on-Tyne, in the county of Northumberland, Engineer, has given the like notice in respect or the invention of "Improvements in hydraulic cotton presses worked by steam."

2887. And ROBERT THOMAS WORTON, of Newberry Place, Kentish Town, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in pianofortes."

2888. And JOSEPH ELSE, of Mansfield, in the county of Nottingham, Roller Coverer, and THOMAS GODFREY, of the same place, Gentleman, have given the like notice in respect of the invention of "An improved washing apparatus."

As set forth in their respective petitions, all recorded in the said office on the 16*th day of November,* 1861.

2891. And JOHN HAWKINS, of Lisle Street, London, in the county of Middlesex, and of Walsall, in the county of Stafford, Bit, Spur, and Stirrup Manufacturer, has given the like notice in respect of the invention of "Certain improvements in bits for riding and driving."

2892. And WILLIAM CLIFF and EDWIN CLIFF, Manufacturers, at St. Quentin, departement de l'Aisne, empire de France, have given the like notice in respect of the invention of "Improvements in the manufacture of lace."

2894. And FREDERICK CAESAR PAETOW, of the city of Manchester, in the county of Lancaster, Commission Merchant, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for raising and finishing fabrics."—A communication to him from abroad by Mr. Tillman Esser, of Burtscheid, in the kingdom of Prussia.

2898. And GUILLAUME PRODON-BONNETON and MARTHE GUILLAUME PRODON, both of Thiers, in the department of Puy-de-Dome, in the empire of France, Engineers, have given the like notice in respect of the invention of "Improvements in means or apparatus for rolling metals."

As set forth in their respective petitions, all recorded in the said office on the 18*th day of November,* 1861.

2901. And LUKE SMITH and MATTHEW SMITH, both of Heywood, in the county of Lancaster, Mechanics, have given the like notice in respect of the invention of "Improvements in raising liquids, and in apparatus connected therewith, parts of which are applicable to improving the quality of fermented liquors."

2903. And THEOPHILUS REDWOOD, of 19, Montague Street, Russell Square, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in the manufacture of starch and of a vegetable sizing powder."

As set forth in their respective petitions, both recorded in the said office on the 19*th day of November,* 1861.

2919. And EDWARD PEYTON, of Birmingham, in the county of Warwick, Manufacturer, and WILLIAM FOTHERGILL BATHO, of the same place, Manager, have given the like notice in respect of the invention of "Improvements in the moulds or chills employed in casting corner blocks, dovetail grooves and other parts of metal bedsteads and other like articles, in frames for carrying such moulds, and in tubes for the pillars of bedsteads and other like articles."

As set forth in their petition, recorded in the said office on the 20*th day of November,* 1861.

2932. And WILLIAM AMBLER, of Keighley, in the county of York, Paper Merchant, has given the like notice in respect of the invention of "Improvements in the manufacture of loom pickers."

2938. And EDWARD PEYTON, of Birmingham, in the county of Warwick, Manufacturer, and WILLIAM FOTHERGILL BATHO, of the same place, Manager, have given the like notice in respect of the invention of "Improvements in laths for supporting bedding and cushions in bedsteads, couches, sofas, and seats."

As set forth in their respective petitions, both recorded in the said office on the 22*nd day of November,* 1861.

2945. And JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in toothed wheels, and in the apparatus used in their manufacture."—A communication to him from abroad by Jean Baptiste Buissart and Therese Leome Levesque, both of Paris, in the empire of France.

As set forth in his petition, recorded in the said office on the 23rd day of November, 1861.

2972. And CHARLES STEVENS, of 31, Charing Cross, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "An improved indelible anti-corrosive ink."—A communication to him from abroad by Louis Croc, of Paris, in the empire of France.

2975. And WILLIAM FIRTH, of Leeds, in the county of York, Merchant, and ROBERT RIDLEY, of Leeds aforesaid, Engineer, have given the like notice in respect of the invention of "Improvements in apparatus and machinery for working coal and other mines."

2976. And JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "A new or improved apparatus for supporting the womb in cases of prolapsus uteri."—A communication to him from abroad by Doctor Otto Langgaard, of Berlin, in the kingdom of Prussia.

2977. And GEORGE EDMUND DONISTHORPE and WILLIAM FIRTH, of Leeds, in the county of York, Merchants, and ROBERT RIDLEY, of Leeds aforesaid, Engineer, have given the like notice in respect of the invention of "Improvements in machinery and apparatus for working coal and other mines."

As set forth in their respective petitions, all recorded in the said office on the 26th day of November, 1861.

2979. And JOHN STANDFIELD, of Stratford, in the county of Essex, Engineer, has given the like notice in respect of the invention of "Improvements in apparatus for regulating and indicating the speed of steam engines and other machinery."

As set forth in his petition, recorded in the said office on the 27th day of November, 1861.

3029. And JAMES BURROWS, of Wigan, and JOSEPH DOUGAN, of Haigh, in the county of Lancaster, Engineers, have given the like notice in respect of the invention of "Certain improvements in winding or driving drums or pulleys."

As set forth in their petition, recorded in the said office on the 3rd day of December, 1861.

3108. And WILLIAM HENRY TOOTH, of Rhodeswell Road, in the county of Middlesex, Engineer, and WILLIAM YATES, the younger, of Parliament Street, in the city of Westminster, Agent, have given the like notice in respect of the invention of "Improvements in the manufacture of iron and steel, and in the machinery, apparatus, or furnaces used therein, and for the production of gas to be employed in such manufacture."

As set forth in their petition, recorded in the said office on the 11th day of December, 1861.

3276. And ALEXANDER EDWARD and JAMES EDWARD, of Dundee, in the county of Forfar, North Britain, Spinners, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for spinning fibrous materials."

As set forth in their petition, recorded in the said office on the 31st day of December, 1861.

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66. And JOEL HAYWOOD TATUM and WILLIAM JAMES WILLIAMS, of New York, United States of America, but now residing at Arundel Street, Strand, in the county of Middleseex, have given the like notice in respect of the invention of "Improvements in the manufacture and structure of wicks, and in the application of the same to the manufacture of candles."

As set forth in their petition, recorded in the said office on the 9th day of January, 1862.

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264. And EDWARD HENRY CRADOCK MONCTON, of Finesshade, in the county of Northampton, Esquire, has given the like notice in respect of the invention of "Improvements in the application of electricity for obtaining ammonia and other useful products during the combustion of coal and fuel, and in the apparatus employed therein."

As set forth in his petition, recorded in the said office on the 31st day of January, 1862.

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571. And HENRY BOWEN, of Cardiff, in the county of Glamorgan, Gas Engineer, has given the like notice in respect of the invention of "Improvements in gas meters."

As set forth in his petition, recorded in the said office on the 1st day of March, 1862.

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583. And HENRY BUNNING, of Field House, New Cross, Deptford, in the county of Kent, has given the like notice in respect of the invention of "Improvements in the manufacture of lubricating grease or compounds."

As set forth in his petition, recorded in the said office on the 3rd day of March, 1862.

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593. And THOMAS GREENWOOD, of Leeds, in the county of York, Machine Maker, has given the like notice in respect of the invention of "Improvements in sewing machines."

As set forth in his petition, recorded in the said office on the 4th day of March, 1862.

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598. And WILLIAM HENSMAN, of Woburn, in the county of Bedfordshire, and WILLIAM HENSMAN the younger, of Linslade, in the county of Buckinghamshire, Agricultural Engineers, have given the like notice in respect of the invention of "Improvements in steam ploughs, and in apparatus connected therewith."

600. And Thomas Bostock, of Stone, in the county of Stafford, Boot and Shoe Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of boots and shoes."

As set forth in their respective petitions, both recorded in the said office on the 5th day of March, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

25th March, 1862.

2317. John Eastwood, of Bradford, in the county of York, Machine Wool Comber, and John Barnett Joyce, of Bradford aforesaid, Machine Maker, for an invention of "Improvements in machinery or apparatus for combing wool and other fibrous substances."—Dated 17th September, 1861.

2401. Henry Nunn, of Chelsea, in the county of Middlesex, Whitesmith, for an invention of "Improvements in mangles."—Dated 26th September, 1861.

2415. George Smith, of Liverpool, in the county of Lancaster, Brass and Britannia Metal Finisher, for an invention of "Improvements applicable to gas meters."—Dated 27th September, 1861.

2421. Georges Joseph Ganier and Emile Eugène Collet, of No. 12, Place de la Bourse, in the city of Paris, and empire of France, Advertisement Agents, for an invention of "Improvements in envelopes."—27th September, 1861.

2423. William Newton Wilson, of 144, High Holborn, in the county of Middlesex, Sewing Machine Manufacturer, for an invention of "Improvements in sewing machines, and apparatus connected therewith."—Dated 28th September, 1861.

2425. John Reeves, of the city of New York, in the United States of America, now residing in London, in the county of Middlesex, for an invention of "Improvements in electro-magnetic engines for obtaining and applying motive power."—Dated 28th September, 1861.

2434. Benjamin George George, of Hatton Garden, in the city of London, Lithographer, for an invention of "Improvements in the mounting of tablets, show bills, prints, photographs, and drawings, and of producing embossed ornamentation applicable to various purposes."—Dated 30th September, 1861.

2442. William Edsall Matthews, of Sea View, parish of St. Helen's, in the Isle of Wight, Baker, for an invention of "An improved apparatus for conveying a line or other medium of communication from a ship or vessel for the purpose of obtaining relief or assistance in case of shipwreck, or for any other purpose to which the invention may apply."—Dated 1st October, 1861.

2444 Oscar Octave Lesourd, of Paris, in the French empire, but temporarily residing in Panton Street, in the county of Middlesex, Barrister, for an invention of "Improvements in joining pipes and tubes, or in forming or securing the joints thereof."—A communication to him from abroad by Jules Lemoine, of 34, Rue Saint Paul, Paris, France.—Dated 1st October, 1861.

2460. Edgar Breffit, of King William Street, in the city of London, Glass Manufacturer, for an invention of "Improvements in machinery employed in cutting hollow and solid corks."—Dated 2nd October, 1861.

2461. Edgar Breffit, of King William Street, in the city of London, Glass Manufacturer, for an invention of "Improvements in the manufacture of boxes or cases, and in machinery employed therein."—Dated 2nd October, 1861.

2467. Henry Law, Civil Engineer, of No. 15, Essex Street, Strand, in the county of Middlesex, at present residing at Rio de Janeiro, in the Brazils, for an invention of "Improvements in machinery and apparatus for raising ships and other vessels out of the water for the purposes of examination, cleaning, or repair, some of which are applicable to the docking of vessels for the same purposes."—Dated 3rd October, 1861.

2499. Alexander Chaplin, of Glasgow, in the county of Lanark, and of Sackville Street, in the county of Middlesex, Engineer, for an invention of "Improved combined winding engine, boiler, and cooking and distilling apparatus, including improvements also applicable separately."—Dated 7th October, 1861.

2507. William Catford, of Chard, in the county of Somerset, Machinist, and John Sherwood Wheatley, of Nottingham, in the county of Nottingham, Lace Manufacturer, for an invention of "Improvements in the manufacture of bobbin net or twist lace."—Dated 8th October, 1861.

2508. Henry Willis, of Albany Street, Regent's Park, in the county of Middlesex, Organ Builder, for an invention of "Improvements in the construction of organs."—Dated 8th October, 1861.

2512. Isaac Evans, junr., Collier, of Cefn Mawr, Ruabon, in the county of Denbighshire, North Wales, for an invention of "An improved miners' lamp."—Dated 8th October, 1861.

2519. John Norman, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in hammers to be worked by steam or other elastic fluid, and in anvils for the same."—Dated 9th October, 1861.

2539. Abraham English, of Hatfield, in the county of Herts, Inspector of Rural Police, for an invention of "Improvements in reins or apparatus for preventing harnessed horses from falling."—Dated 10th October, 1861.

2588. Thomas Wild, of Heywood, in the county of Lancaster, Cotton Spinner, and Thomas Hodson, of the same place, Engineer, for an invention of "Certain improvements in the method of, and apparatus for, heating the 'feed water' for

steam boilers, and in employing steam produced by such means."—Dated 17th October, 1861.

2652. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improvements in railways, and in iron pavements and railways combined, parts of which improvements are applicable to the construction of railway chairs and to cast iron pavements for ordinary streets."—A communication to him from abroad by Barzillai Coat Smith, of Burlington, New Jersey, in the United States of America.—Dated 23rd October, 1861.

3146. WILLIAM RODRIGUES ROGERS, of Gray's Inn Road, in the county of Middlesex, Builder, for an invention of "An improved mode of constructing dovetail joints."—Dated 14th December, 1861.

3172. MORRIS HANFF, of Tottenham Street, Tottenham Court Road, in the county of Middlesex, Fancy Box Maker, for an invention of "Improvements in the manufacture of boxes and cases."—Dated 18th December, 1861.

3256. GEORGE HENRY BIRKBECK, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in apparatus for raising or forcing water or other fluids."—A communication to him from abroad by Mr. Edward Bruce Boughton Barker, H. B. M. Consul at Samsoun and Sinope, Black Sea.—Dated 30th December, 1861.

61. JOHN BRUNT, of No. 15, Rue Petrelle, in the city of Paris, Engineer, for an invention of "Improvements in gas meters."—Dated 9th January, 1862.

234. THOMAS MERITON, of Number 3, Leadenhall Street, in the city of London, and of Hamburgh, Engineer, for an invention of "Improvements in marine and other boilers for generating steam."—Dated 29th January, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 22nd March*, 1862, *inclusive.*)

20th March.

795. THOMAS DOWNS SHIPMAN, of Toronto, Canada West, North America, for an invention of "Improvements in apparatus for stamping and printing."—Partly a communication when abroad from Mr. Kendell, of Canada aforesaid.—Dated 30th March, 1859.

21st March.

721. WILLIAM ARMAND GILBEE, of No. 4, South Street, Finsbury, London, Patent Agent, for an invention of "An improved apparatus for stretching and polishing silk thread."—A communication from abroad by Messieurs Lyonnet and Prénat, of St. Etienne, France.—Dated 22nd March, 1859.

722. WILLIAM WEILD, of the city of Manchester, in the county of Lancaster, Machinist, for an invention of "Improvements in machinery and arrangements for coating slips, sheets, rods, and bars of metal, and laths, rods, and boards of wood and similar articles formed of other substances, with paints, varnishes, and other like preparations, and drying the same."—Dated 22nd March, 1859.

733. CHARLES A. WATKINS, of the firm of Hamilton and Co., Brush Manufacturers, of Greek Street, Soho Square, for an invention of "Improvements in the manufacture of brushes."—Dated 22nd March, 1859.

22nd March.

744. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for the manufacture of sheet tin."—A communication from abroad by Monsieur Masson, of Paris, in the empire of France.—Dated 23rd March, 1859.

746. FREDERIC TILLETT, of Banner Street, in the parish of St. Luke's, in the county of Middlesex, Splint Cutter, for an invention of "Improvements in machinery for cutting splints for matches."—Dated 23rd March, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 22nd March*, 1862, *inclusive.*)

20th March.

671. JOHN MARLAND, of Leeds, for an invention of "Improvements in preparing for and in sizing and warping woollen and worsted yarn."—Dated 26th March, 1855.

21st March.

700. JOHN BLAIR, of Glasgow, in the county of Lanark, North Britain, Hat Manufacturer, for an invention of "Improvements in hats and other coverings for the head."—Dated 29th March, 1855.

22nd March.

655. WILLIAM BROWN, of Gresham Street, in the city of London, Warehouseman, for an invention of "An improved mode of preparing sewing silk for the market."—Dated 24th March, 1855.

680. GEORGE LEONARD TURNEY, of Wood Street, Cheapside, in the city of London, Needle and Pin Manufacturer, for an invention of "An improved mode of arranging or packing pins and needles for sale."—Dated 28th March, 1855.

COLONIAL PATENT LAW.

NEWFOUNDLAND.

ANNO NONO DECIMO
VICTORIÆ REGINÆ.

CAP. XIX.

AN ACT TO REPEAL THE PATENT ACTS OF THIS COLONY, AND TO MAKE OTHER PROVISIONS IN LIEU THEREOF.

[Passed 12th May, 1856.]

Whereas it is expedient to repeal an Act passed in the fourteenth year of the reign of Her Majesty, intituled "An Act for granting of Patents for useful Inventions," and an Act passed in the nineteenth year of Her Majesty's reign, intituled "An Act to amend an Act passed by the Legislature of this Island, in the fourteenth year of the reign of Her Majesty, intituled 'An Act for the granting of Patents for useful Inventions,'," and to enact other provisions in lieu thereof:—

Be it therefore enacted by the Governor, Legislative Council and Assembly, in Legislative Session convened, as follows:—

I. That the said Act passed in the fourteenth year of the reign of Her Majesty, intituled "An Act for granting of Patents for useful inventions," and the said Act passed in the eighteenth and nineteenth years of the reign of Her Majesty, intituled "An Act to amend an Act passed by the Legislature of this Island in the fourteenth year of the reign of Her Majesty, intituled 'An Act for the granting of Patents for useful inventions,'" be and the same are hereby respectively repealed: Provided always, that nothing herein contained shall in any way affect any Letters Patent already granted under and by virtue of the said recited Acts, or any matter or thing done in pursuance thereof.

II. From and after the publication of this Act, whenever any person whomsoever shall apply to the Governor, alleging that he hath invented and discovered any new and useful art, machine, manufacture or composition of matter, not theretofore known or used, and shall, by petition to the Governor, signify his desire to obtain an exclusive property in such new invention and discovery, and shall pray that a Patent be granted for the same, it shall and may be lawful for the Governor, by and with the advice and consent of Her Majesty's Council, to cause and direct Letters Patent, under the Great Seal of this Island, to be issued, which Letters Patent shall recite the allegations and suggestions of the said Petition so to be preferred as aforesaid, and shall therein give a short description of the said invention and discovery, and thereupon shall grant to such person so applying for the same, his executors, administrators, or assigns, for a term not exceeding fourteen years, the full and exclusive right and liberty of making, constructing and using, and vending to others to be used, the said new invention or discovery; which Letters Patent shall be good and available to the grantee therein named, by force of this Act, and shall be recorded in the office of the Colonial Secretary in a book to be kept for that purpose, and shall be delivered to the Patentee: Provided always, that it shall be lawful for the Governor in Council, if they should deem it expedient, to insert in any such Letters Patent a provision extending the operation thereof for a further term of seven years; and provided further, that before the Great Seal of this Island shall be affixed to any such Letters Patent, or the same shall be issued and signed as aforesaid, such Letters Patent shall be delivered to Her Majesty's Attorney General of this Island, who shall examine the same, and shall, if he finds the same conformable to this Act, certify accordingly, and return the same within fifteen days into the office of the Colonial Secretary, to be issued and signed.

III. Where any Letters Patent shall be obtained by any person, in manner aforesaid, for any new and useful invention or discovery in any art, machine, or composition of matter, and thereafter any other person shall discover or make any improvement in the principle or process of any such art, machine, or composition of matter, for which such Patent hath been granted, and shall make application for and obtain Letters Patent under this Act, for the exclusive right of such improvement, it shall not be lawful for the person who shall obtain and procure Letters Patent for any such improvement, to make, use, or vend the original invention or discovery, nor for the person who shall have procured Letters Patent for the original invention or discovery, to make, use, or vend any such improvement: Provided always, that simply changing the form or the proportions of any machine or composition of matter, in any degree, shall not be deemed a discovery or improvement within the meaning of this Act.

IV. It shall and may be lawful for any Person to obtain and receive from the office of the Colonial Secretary any copy or copies of any such Letters Patent, or of the petition whereon the same were granted and issued, or of any paper connected therewith, or any drawing relating to the same, on payment, for such copy or copies, of such fees as are now payable at the office of the Colonial Secretary for copies of other documents.

V. Before any person shall obtain or receive any Letters Patent under this Act, such person shall make oath, or, if a Quaker, shall make solemn affirmation, in writing, before some one of the Justices of Her Majesty's Supreme Court, that he doth verily believe that he is the true inventor or discoverer of the art, machine, composition of matter, or improvement, for which he solicits Letters Patent, and that such invention or discovery hath not, to the best of his knowledge or belief, been known or used in this Island or in any other country, which oath or affirmation shall be delivered in with the petition for such Letters Patent.

VI. Together with such petition and oath or affirmation, before any person shall receive or obtain any Letters Patent as aforesaid, such person shall also deliver into the office of the Colonial Secretary a written description of his invention, and of the manner of using or process of compounding the same, in such full, clear, and exact terms as to distinguish the same from all other things before known, and to enable any person skilled in the art or science of which it is a branch, or with which it is most nearly con-

nected, to make, compound, and use the same, and in case of any machine, shall deliver a model thereof into the office of the Colonial Secretary, and shall explain the principle and the several modes in which such person hath contemplated the application of that principle or character by which it may be distinguished from other inventions, and shall accompany the whole with drawings and written references, where the nature of the case admits of drawings, or with specimens of the ingredients, and of the composition of matter, sufficient in quantity for the purpose of experiment, where the invention is of a composition of matter; which description, signed by such person so applying for such Letters Patent, and attested by two witnesses, shall be filed in the office of the Colonial Secretary, and copies thereof, certified under his hand, shall be competent evidence in all courts where any matter or thing, touching or concerning the said Letters Patent, shall or may come into question; provided, nevertheless, that where, from the complicated nature of any machinery, the cost of a model thereof may be so great as to prevent any ingenious but poor persons from obtaining Patents for their useful inventions, it shall and may be lawful for the Governor, by and with the advice and consent of the Council, if they shall see fit and proper under all the circumstances so to do, to dispense with the delivery of such model into the office of the Colonial Secretary previous to the granting of any such Patent; and in such case the requisitions of said Act being in all other respects complied with, the person applying for any Patent shall be entitled thereto in the same manner as if such model had been so lodged as aforesaid.

VII. Any Patentee, his executors or administrators, may assign and transfer all his right, title, and interest in the said invention and discovery, in the Letters Patent to him granted, to any person whomsoever; and the assignee thereof, having recorded the said assignment in the office of the Colonial Secretary, shall thereafter stand in the place and stead of the original Patentee, as well as to all right, privilege, and advantage, as also in respect of all liability and responsibility as to the said Letters Patent, and the invention and discovery thereby secured; and in like manner shall the assignees of any such assignee stand, and be considered to be, in the place and stead of the original Patentee or Inventor.

VIII. Whenever, in any case, any Letters Patent shall be, or shall or may have been, granted to any person under and by virtue of this Act, and any person, without the consent of the Patentee, his executors, administrators, or assigns, first had and obtained in writing, shall make, devise, use, or sell the thing, invention, or discovery, whereof the exclusive right is secured to the said Patentee by such Letters Patent, such person so offending shall forfeit and pay to the said Patentee, his executors, administrators, or assigns, a sum equal to three times the actual damage sustained by such Patentee, his executors, administrators, or assigns, from or by reason of such offence, which sum shall and may be recoverable, together with costs of suit, by action on the case, founded on this Act, in any superior court of this Island.

IX. Provided always, that the defendant in such action shall be permitted to plead the general issue, and give this Act and any special matter in evidence, tending to prove that the specification filed by the plaintiff does not contain the whole truth relative to the invention or discovery therein alleged to have been made by the said plaintiff, or that it contains more than is necessary to produce the described effect (which concealment or addition shall fully appear to have been made for the purpose of deceiving the public), or that the thing, invention, or discovery, thus secured by Letters Patent, as aforesaid, was not originally discovered by the Patentee, but had been in use, or had been described in some public work, anterior to the supposed invention or discovery of the said Patentee, or that the said Patentee had surreptitiously obtained Letters Patent as aforesaid, for the invention or discovery of some other person; in either of which cases, upon sufficient and legal proof thereof, a verdict shall be returned and judgment shall be entered for the said defendant with costs, and the said Letters Patent shall thereupon be and become, and shall by the said Court be adjudged, void and of no effect.

X. No applicant shall be deprived of his right to a Patent in this Colony for his invention, by reason of his having previously taken out Letters Patent therefor in any other country; provided that such invention shall not have been introduced into public and common use in this Colony prior to the application for a Patent therein, and that the Patent granted in this Colony shall not continue in force after the expiration of the Patent granted elsewhere, and that where more than one such Patent or like privilege is obtained abroad, then immediately upon the expiration or determination of the term which shall first expire or be determined of such several Patents or like privileges, the Patents granted in this Colony shall cease to be in force: Provided further, that no Letters Patent for or in respect of any invention for which any such Patent or like privilege as aforesaid shall have been obtained elsewhere, and which shall be granted in this Colony, after the expiration of the term for which such Patent or privilege was granted or was in force, shall be of any validity.

XI. Letters Patent may be issued by the Governor and Council to the assignee of any person who may have taken out Letters Patent for his invention or discovery in any other country, but not for any invention or discovery made abroad for which no Letters Patent have been there obtained; provided that the invention or discovery so assigned shall not have been introduced into public and common use into this Colony prior to the application for a Patent; and that the assignee of such foreign Patent shall file, with his application, the assignment duly proved under which he claims a Patent in this Colony, and an affidavit, setting forth the date of the Patent abroad, that the article thereby patented has not been in public and common use in this Colony, and that he is the assignee for a good consideration.

XII. Any Letters Patent which may be taken out under or by virtue of this Act, and which shall not have been brought into operation within two years next ensuing from and after the date thereof, such Letters Patent shall at the expiration of the said period of two years be deemed to be forfeited, and shall thence be and become void and of no effect.

XIII. No Letters Patent shall be granted under or by virtue of this Act until notice shall be published in the Royal Gazette and one other of the newspapers of this Colony, for at least four weeks, of the intention of the applicant to apply for such Letters Patent;

and such notice shall contain, in general terms, the description of invention for which such Letters Patent shall be desired.

XIV. If by mistake, accident, or inadvertence, and without any wilful default, or intent to defraud or mislead the public, a Patentee shall in his specification have claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, but of which he was not the original or first inventor, and shall have no just or legal right to claim the same, his Patent in such case shall be deemed good and valid for so much of the invention or discovery as shall be actually his own, provided it is a material and substantial part of the thing patented, and be plainly distinguishable from other parts patented without right; and every such Patentee and his legal representatives, whether holding the whole or a particular interest in the Patent, may maintain suits at law or in equity, for any infringement of such part of the same as is actually the invention or discovery of the Patentee, although his specification may embrace more than he has a legal right to claim; but if in such case the plaintiff shall obtain a verdict or judgment, he shall not be entitled to costs, unless before the commencement of the suit he shall have filed in the office of the Colonial Secretary a disclaimer, attested by one witness or more, of that part of the thing patented which was claimed without right; provided always, that no person bringing a suit shall be entitled to the benefits of this section, if he shall have unreasonably neglected or delayed to record his disclaimer.

XV.—If through inadvertence, accident or mistake, a Patentee shall have made his specification too broad, by claiming more than that of which he was the original or first inventor, (some material and substantial part of the thing patented being justly and truly his own), such Patentee, or his legal representatives, may disclaim the excess; the disclaimer shall be in writing, and shall state the extent of interest in the Patent held by the party making the same; it shall be attested by one or more witnesses, and be recorded in the office of the Colonial Secretary; thereafter, such disclaimer shall be taken and considered as part of the original specification, to the extent of the interest possessed by the party making the same, or by those claiming under him; but no such disclaimer shall affect any action or suit pending at the time of its being recorded, except so far as may relate to the question of unreasonable neglect or delay in recording the same.

XVI.—If any Patent shall become inoperative, or invalid, by reason of a defective or insufficient description or specification, or by reason of the Patentee claiming in his specification, as his own invention, more than he had a right to claim, and the error has arisen from inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, it shall be lawful for the Governor, upon the surrender of such Patent, and upon petition therefor, to cause a new Patent to be issued to the Patentee, for the residue of the term mentioned in the first Patent in accordance with the Patentee's amended description and specification; in case of his death, or the assignment by him of the original Patent or any fractional interest therein, the right shall vest in his legal representatives, to the extent of their respective interests in such Patent; and the Patent so re-issued, together with the amended description and specification, shall have the same effect and operation in law as though the same had been originally filed in such amended form, before the issuing of the original Patent.

XVII.—If an original Patentee shall be desirous of adding a description and specification of an improvement upon his original invention or discovery, made or discovered by him subsequent to the date of his Patent, he may, upon the like proceedings being had in all respects as in the case of an original application, have the same annexed to his original description and specification; and the Colonial Secretary shall certify upon such annexed description and specification the time of its being annexed and recorded, and thereafter it shall have the same effect in law as if it had been embraced in the original description and specification, and had been recorded therewith.

XVIII. No Patent for any invention or discovery, granted in England or elsewhere out of the Colony subsequent to this Act coming into operation, and extending to the Colonies, shall be of force and effect in this Colony, until copies of the original specification and drawings filed, or duplicate of the models lodged, in England, or elsewhere out of the Colony, upon which such Patent was there obtained, shall be filed or lodged in the office of the Colonial Secretary, who shall grant a certificate of the lodging or filing of the same.

XIX.—Quakers may affirm in all cases where an oath is required by this Act; and all oaths or affirmations under this Act, unless otherwise provided, may be taken in this Colony before a Judge of the Supreme Court, or any of the Circuit Courts, or a Commissioner for taking affidavits in the same; or in Great Britain or Ireland, before the Mayor of a City or Borough, the deposition being certified under the corporate seal; or, in a Foreign Country, before a British Consul or Vice-Consul, and certified by his seal of office.

XX.—Any Person who may take out Letters Patent under or by virtue of this Act shall pay for the same such fees as are charged on documents issued under the Great Seal of this Island, and shall, in addition, deposit with the Colonial Secretary the sum of five pounds, to be by him paid to the Receiver General, for the uses of the Colony.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s*.

EXTENSION OF PATENTS TO THE COLONIES. Abstract of Replies to the Secretary of State's Circular Despatch of January 2, 1853, on the subject of the Extension of Patents for Inventions to the Colonies. Second Edition, with revised Table, 1861. Price 2*s*.

List of Specifications published during the week ending 22nd March, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
2018	3*d.*	Cox, N.—Securing bulkheads.
2019	3*d.*	Gedge, W. E.—(*A communication from E. Fleury.*) — Boards for pressing cloth, &c.
2020	3*d.*	Durand, F.—Metallic tubes.
2021	3*d.*	Damoiseau, A. A. R.—Kilns for baking bricks, tiles, &c.
2022	3*d.*	Wainwright, G. J.—Machinery for preparing and spinning cotton.
2023	3*d.*	Brooman, R. A.—(*A communication from M. Miller.*)—Coating wire.
2024	9*d.*	Edwards, E.—Separating mineral ores, coal, &c. from impurities.
2025	10*d.*	Silvester, T. — Spring balances or weighing apparatus.
2026	7*d.*	Wilds, W.—Ventilator.
2027	11*d.*	Billing, J.—Stoves.
2028	3*d.*	Lebaudy, A.—(*A communication from J. F. Cail.*)—Towing vessels or boats.
2029	1*s.* 1*d.*	Carey, S., and Pierce, W. M.—Apparatus for re-burning animal charcoal.
2030	3*d.*	Rivett, J. C., Vickers, J., and Hayes, S.—Spinning and doubling.
2031	4*d.*	Bethell, J.—Manufacture of journals, axle-boxes, and bearings, &c. from steatite.
2032	4*d.*	Martin, J. C.—Treating bones, &c.
2033	3*d.*	Webley, P., and Webley, T. W.—Rifle sight.
2034	3*d.*	Kain, F. A.—Artificial stone or earthenware.
2035	3*d.*	Hutchings, J. T.—Tennis and racket bats.
2036	6*d.*	Desborough, S.—Umbrellas and parasols.
2037	4*d.*	Menard, A. F. — (*A communication from Y. A. Rehm.*)—Tanning.

*** Specifications will be forwarded by post on receipt of the amount of price and postage (the latter rarely exceeding One Penny). Sums exceeding 5*s.* must be remitted by Post Office Order, made payable at the Post Office, Holborn, to Mr. Bennet Woodcroft, Great Seal Patent Office.

THE CHRONOLOGICAL INDEX of APPLICATIONS for PATENTS and PATENTS GRANTED from the 1st January to the 31st December, 1859. Price 6*s.* 6*d.*

THE ALPHABETICAL INDEX for the above period (including communications). Price 10*s.*

THE SUBJECT-MATTER INDEX for the above period. Price 20*s.*

THE CHRONOLOGICAL INDEX of APPLICATIONS for PATENTS and PATENTS GRANTED from the 1st January to the 31st December, 1860. Price 7*s.*

THE ALPHABETICAL INDEX for the above period. Price 10*s.* 6*d.*

THE SUBJECT-MATTER INDEX for the above period. Price 22*s.*

THE CHRONOLOGICAL INDEX of PATENTS of INVENTION, from March 2, 1617 14 James I.), to September 30, 1852 (16 Vict.), 2 vols. Price 30*s*

THE ALPHABETICAL INDEX of PATENTEES of Inventions for the above period. Price 20*s.*

THE SUBJECT-MATTER INDEX of PATENTS for the same period — *Second Edition*—to which is prefixed a Key of Terms and Phrases. 2 vols. Price 2*l.* 16*s.*

A Key to the *First Edition* of the above work is also published separately, and may be had on application.

THE CHRONOLOGICAL INDEXES of APPLICATIONS for PATENTS and PATENTS GRANTED from the 1st October to the 31st December, 1852, and from the 1st January to the 31st December, 1853, in one volume. Price 11*s.*

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THE SUBJECT-MATTER INDEX, from 1st January to 31st December, 1853. Price 16*s.*

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THE ALPHABETICAL INDEX for the above period. Price 7*s.* 6*d.*

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THE CHRONOLOGICAL INDEX of APPLICATIONS for PATENTS and PATENTS GRANTED from the 1st January to the 31st December, 1856. Price 6*s.* 6*d.*

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No. 859. FRIDAY, MARCH 28, 1862. Price 2d.

Applications for Letters Patent.

(25th, 26th, and 27th March, 1862.)

819. Echlin Molyneux, junior, of Seaview, Enniskerry, in the county of Wicklow, Ireland, for an invention of "Improvements in air, gas, and vapour engines."—Dated 25th March, 1862.

820. Amherst Hawker Renton, of 14, Royal Avenue Terrace, Chelsea, in the county of Middlesex, Civil Engineer, and Edward Cottam, of Pimlico, in the county of Middlesex, Engineer, of the firm of Robinson and Cottam, for an invention of "Improvements in apparatus for steering ships."—Dated 25th March, 1862.

821. Walter Beaumont, Lieutenant 33rd Lancashire Rifle Volunteers, and John William Edge, Gun and Rifle Manufacturer, both of Manchester, in the county of Lancaster, for an invention of "Improvements in sights for rifles."—Dated 25th March, 1862.

822. Alfred Fryer, of Manchester, in the county of Lancaster, Sugar Refiner, for an invention of "Improvements in the manufacture of sugar, and in separating liquids from sugar and other substances."—Dated 25th March, 1862.

823. Albert Marcius Silber, of the firm of Silber and Fleming, of Wood Street, in the city of London, Merchants, for an invention of "An improved fastening for purses, pocket books, bags, and other articles."—A communication to him from abroad by Johann Georg Klein, of Offenbach, in Germany.—Dated 25th March, 1862.

824. Theophile Guibal, of No. 43, Rue des Groseillers, Mons, in the kingdom of Belgium, Civil Engineer, for an invention of "Improvements in the construction of ventilators for the ventilation of mines and furnaces."—Dated 25th March, 1862.

825. Edmund Morewood, of Stratford, in the county of Essex, and Andrew Whytock, of Little St. Andrew Street, St. Martin's Lane, in the county of Middlesex, for an invention of "Improvements in the manufacture or shaping of iron or other material."—Dated 55th March, 1862.

826. William Palmer, of Sutton Street, Clerkenwell, in the county of Middlesex, for an invention of "Improvements in lamps."—Dated 25th March, 1862.

827. Charles Culling, of Downham Market, in the county of Norfolk, Gunmaker, for an invention of "Improvements in fire-arms."—Dated 25th March, 1862.

828. William Clissold, of Dudbridge Works, near Stroud, in the county of Gloucester, Machine Manufacturer, for an invention of "Improvements in carding engines."—Dated 25th March, 1862.

829. John Thomas Loft, of Brooklyn, New York, United States of America, but now residing at Berwick Street, Pimlico, in the county of Middlesex, Architect, for an invention of "Improved machinery for covering strips of metal and wire."—Dated 25th March, 1862.

830. Léo De la Peyrouse, of 13, Panton Square, in the county of Middlesex, Manufacturer, for on invention of "Improvements in the preservation of animal substances."—Dated 26th March, 1862.

831. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in apparatus for cleaning tubes and flues of steam boilers and similar conduits."—A communication to him from abroad by Claude Dumas, of Paris, in the empire of France.—Dated 26th March, 1862.

832. John Wilson, Hotpresser and Calenderer, in Glasgow, in the county of Lanark, for an invention of "Improvements in the apparatus for and

in the method of hot pressing or finishing plaids, shawls, handkerchiefs, and other woven fabrics." —Dated 26th March, 1862.

833. James Parker, of Huddersfield, in the county of York, Engineer, for an invention of "Improvements in steam engines, and in apparatus connected therewith."—The result partly of a communication from abroad made to him by Bernhard August Schäffer, of Magdeburg, in the kingdom of Prussia, and partly of invention and discovery made by himself.—Dated 26th March, 1862.

834. William John Taylor, of No. 5, Upper Church Street, King's Road, Chelsea, in the county of Middlesex, for an invention of "An improved method of colouring Portland cement for plain and ornamental plasterer's work on the walls of buildings and other erections."—Dated 26th March, 1862.

835. Henry Nunn, of Chelsea, in the county of Middlesex, Whitesmith, for an invention of "Improvements in the construction of mangles."—Dated 26th March, 1862.

836. Robert Boby, of Bury St. Edmunds, in the county of Suffolk, Agricultural Implement Maker, for an invention of "Improvements in hay-making machines."—Dated 26th March, 1862.

837. James Boothman, of Gisburn, near Skipton, in the county of York, Farmer, for an invention of "Improvements in bee hives and apparatus connected therewith."—Dated 26th March, 1862.

838. John Taylor, Civil Engineer, and Charles Henry Minchin, Accountant, both of the city of Manchester, in the county of Lancaster, for an invention of "A suspender or improved gallery for supporting the shades of gas or other lights."—Dated 26th March, 1862.

839. Henry Carr, of No. 4, Victoria Street, Westminster, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in applying lubricating fluids to the journals of railway carriages and locomotive engines."—Dated 26th March, 1862.

840. Robert Griffiths, of 69, Mornington Road, Regent's Park, Engineer, for an invention of "Improvements in weapons of warfare for naval purposes."—Dated 26th March, 1862.

841. William Louis Winans, of Brighton, in the county of Sussex, Civil Engineer, for an invention of "A new or improved mode of mounting, and apparatus for manœuvring ordnance in land fortifications."—Dated 27th March, 1862.

842. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "An improved process of and apparatus for separating the fibres of wood, flax, hemp, and other vegetable substances, and extracting the colouring matters therefrom."—A communication to him from abroad by Azel Storrs Lyman, of New York city, United States of America.—Dated 27th March, 1862.

843. John Haworth, of 22, Southampton Street, in the parish of Bloomsbury, in the county of Middlesex, Gentleman, for an invention of "An improved method of conveying telegraphic messages and signals by means of electricity without the intervention of any continuous artificial conductor."—Dated 27th March, 1862.

844. William Greenway, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in the manufacture of bolts for fastening doors, and for other like purposes."—Dated 27th March, 1862.

845. Jean David Schneiter, of Paris, France, Geographer, for an invention of "An improved method for printing the letters, numbers, musical, or other similar characters of maps, plans, sheets of music paper, or other similar impressions, the said method being also applicable to the preserving of printing surfaces."—Dated 27th March, 1862.

846. Thomas George Greenstreet, of 6, Penton Place, Kennington Road, in the county of Surrey, for an invention of "Improvements in window sashes."—Dated 27th March, 1862.

847. Frederick Tolhausen, C.E., and Patent Agent, of 17, Faubourg Montmartre, Paris, in the empire of France, for an invention of "New or improved cigar-tubes or apparatus for holding and smoking cigars and cigarets."—A communication to him from Joseph Charles Toussaint, a person resident at No. 17, Faubourg Montmartre aforesaid.—Complete specification.—Dated 27th March, 1862.

848. Richard Edwards, of Regent Street, Mile End, in the county of Middlesex, Emery Manufacturer, for an invention of "Improvements in machinery and apparatus for pulverizing, stamping, and washing mineral, animal, and vegetable substances."—Dated 27th March, 1862.

849. William Frederick Henson, of 15, New Cavendish Street, Portland Place, in the county of Middlesex, Civil Engineer, and Henry Henson Henson, of No. 13, Parliament Street, Civil Engineer, for an invention of "Improvements in wicks for candles and lamps."—Dated 27th March, 1862.

850. James Lock, of Nassington, in the county of Northampton, for an invention of "Improvements in apparatus for raising or elevating straw and crops on to stacks."—Dated 27th March, 1862.

851. Edward Henry Cradock Monckton, of 5, Thurloe Place, South Kensington, in the county of Middlesex, Esquire, for an invention of "Improvements in the manufacture of effervescing liquids."—Dated 27th March, 1862.

852. Jeanne Louise Henriette Clémence Comtesse de Vernede de Corneillan, of Paris, in the French empire, for an invention of "Improvements in treating open cocoons of silkworms, and in converting the waste resulting therefrom into paper."—Dated 27th March, 1862.

853. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in machinery for preparing, combing, and dressing vegetable fibres."—A communication to him from abroad by John Andrew De Brame, of New York, United States of America.—Dated 27th March, 1862.

854. Robert De Bary, of Finsbury Square, in the county of Middlesex, Gentleman, for an in-

vention of "Improvements in machinery for the manufacture of cigars."—A communication to him from abroad by Julius De Bary, of Offenbach, Hesse Darmstadt.—Dated 27th March, 1862.

855. John Easterbrook and James Hobson Allcard, of Sheffield, in the county of York, Manufacturers, for an invention of "Improvements in vices."—Dated 27th March, 1862.

856. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "Improvements in apparatus for extinguishing fire."—A communication to him from abroad by Gabriel Brasseur, of No. 15, Passage des Petites Ecuries, Paris, France. —Dated 27th March, 1862.

857. Samuel Anderson Emery, of Arundel Street, Coventry Street, in the city of Westminster, Comedian, for an invention of "Improvements in the manufacture of soap."—Dated 27th March, 1862.

858. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in thrashing machines."—A communication to him from abroad by Auguste Bernard Albaret, of Paris, in the empire of France, Mechanician.— Dated 27th March, 1862.

859. William Ford Smith and Arthur Coventry, of "Gresley Iron Works," Ordsal Lane, Salford, in the county of Lancaster, Engineers and Machinists, for an invention of "Improvements in and applicable to lathes and machines for turning and for cutting screws."— Dated 27th March, 1862.

860. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in the means of producing imitation mosaics."—A communication to him from abroad by Charles Auguste Le Bourg, Statuary, of Paris, in the empire of France.— Dated 27th March, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

2893. To Pierre André, Jean François Pline-Faurie, and Joseph Pierre Richard, all of Bordeaux, in the empire of France, for the invention of "Improvements in machinery or apparatus for preparing or manfacturing fuel."

On their petition, recorded in the Office of the Commissioners on the 18th day of November, 1861.

3165. To John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for the invention of "Improvements in machinery or apparatus commonly called 'gins' for cleaning cotton from seeds."

On their petition, recorded in the Office of the Commissioners on the 17th day of December, 1861.

35. To Henry Davis Pochin, of Salford, in the county of Lancaster, Manufacturing Chemist, for the invention of "Improvements in the manufacture of rosin, soap, or size."

On his petition, recorded in the Office of the Commissioners on the 4th day of January, 1862.

93. To William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for the invention of "Improved means or apparatus for gaining or acquiring motive power." —A communication to him from abroad by Hugus Sarrazin, of 15, Passage de Petites Ecuries, Paris, France.

On his petition, recorded in the Office of the Commissioners on the 13th day of January, 1862.

145. To Andrew Lamb, of Southampton, and John White, of West Cowes, Isle of Wight, for the invention of "Improvements in life boats."

On their petition, recorded in the Office of the Commissioners on the 20th day of January, 1862.

235. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the disintegration and bleaching of textile materials for the manufacture of paper."—A communication to him from abroad by Mr. Jean Baptiste Michel Auguste Siry, of 29, Boulevart St. Martin, Paris, Jeweller.

On his petition, recorded in the Office of the Commissioners on the 29th day of January, 1862.

257. To Hermann Schatten, of Hesse Cassel, Civil Engineer, for the invention of "Improvements in the manufacture or construction of gas meters."

On his petition, recorded in the Office of the Commissioners on the 31st day of January, 1862.

279. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in machinery or apparatus for the manufacture of festooned edging or material."—A communication to him from abroad by Mr. Jean Joseph Basset, Proprietor, of 29, Boulevart St. Martin, Paris.

On his petition, recorded in the Office of the Commissioners on the 1st day of February, 1862.

289. To Thomas Mossom Meekins, LL.D., of the Inner Temple, Esquire, Barrister-at-Law, and of 44, Chancery Lane, in the county of Middlesex, for the invention of "The production of a projectile and explosive force to be used in instruments of war for an electric-gas-gun and electric gas shell for a method of using the recoil of weapons for the purpose of increasing the pressure of elastic fluids for the production of a projectile force for a method of rapidly loading weapons at the breech and of a motive force to be used in an electric gas engine or other engines."

On his petition, recorded in the Office of the Commissioners on the 4th day of Febrnary, 1862.

323. To John Lloyd, of Donnington, in the county of Shropshire, Engineer to the Lilleshall Iron Company, for the invention of "Improvements in buffers for engines and carriages on railways."

On his petition, recorded in the Office of the Commissioners on the 7th day of February, 1862.

347. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in reflectors."—A communication to him from abroad by Mr. Louis Jacques Château, of 29, Boulevart St. Martin, Paris, formerly Notary.

349. And to WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in refining cast-iron, wrought, and other malleable iron, and in the cementation of iron."—A communication to him from abroad by Messrs. Louis Joseph Frédéric Margueritte, Chemist, and Alfred Lalouël de Sourdeval, Proprietor, both of 29, Boulevart St. Martin, Paris.

On both his petitions, recorded in the Office of the Commissioners on the 10th day of February, 1862.

389. To GEORGE CRISP BURROWS, of Stoke Holy Cross, in the county of Norfolk, Yeoman, for the invention of "Improvements in lounges, seats, or other apparatus for sitting or reclining on, which improvements are also applicable to rocking horses."

On his petition, recorded in the Office of the Commissioners on the 13th day of February, 1862.

435. To CHARLES THOMAS MARZETTI and JOHN WATSON, of Vine Street, Minories, E.C., for the invention of "Improvements in machinery or apparatus for raising, lowering, and otherwise moving or disposing casks and other bodies."

On their petition, recorded in the Office of the Commissioners on the 19th day of February, 1862.

459. To JAMES SPENCE, of the firm of Messrs. Richardson, Spence, and Co., of Liverpool, in the county of Lancaster, Merchants, for the invention of "Improved apparatus for transhipping and discharging grain and other substances, and for weighing, screening, and fanning such grain and substances during such transhipment and discharge."—The result partly of a communication to him from abroad by Thomas Richardson, of the city and state of New York, one of the United States of America, and partly invented and discovered by himself.

467. And to WILLIAM MCADAM, Pottery and Glass Manufacturer, and WILLIAM CHRYSTAL, Mariner, both of Glasgow, in the county of Lanark, North Britain, for the invention of "Improvements in sheaves or pulleys, journals, bushes, and other similar bearing or rubbing surfaces."

On both their petitions, recorded in the Office of the Commissioners on the 21st day of February, 1862.

469. To HORACE CHAVASSE, of Birmingham, in the county of Warwick, Manufacturer, TIMOTHY MORRIS, of Birmingham, in the county of Warwick, Manufacturer, and GEORGE BATTISON HAINES, of Birmingham, in the county of Warwick, Agent, for the invention of "An improvement or improvements in the manufacture and ornamentation of metallic bedsteads, part of which is also applicable to other articles."

471. And to WILLIAM HENRY ROSS, of Liverpool, in the county of Lancaster, Merchant, for the invention of "Improvements in the manufacture of sugar."—A communication to him from abroad by Edward Beanes, Merchant, residing at Havannah, island of Cuba, inventor.

On both their petitions, recorded in the Office of the Commissioners on the 22nd day of February, 1862.

489. To RICHARD WALLER, of Baker Street, Portman Square, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in machinery and apparatus for joining leather and flexible and textile materials, and for the manufacture of boots and shoes and other coverings for the feet."

On his petition, recorded in the Office of the Commissioners on the 24th day of February, 1862.

499. To JOHN CARNABY, of No. 7A, Skinner Street, in the city of London, Patentee and Manufacturer of Apparatus for the Safe and Economical Use of Gas, for the invention of "Improvements in turning, managing, and regulating the taps and valves of gas pipes."

On his petition, recorded in the Office of the Commissioners on the 25th day of February, 1862.

516. To ALFRED GREEN, of Rose Cottage, North Road, Forest Hill, parish of Lewisham, Kent, for the invention of "Improvements in the method of, and apparatus for, bordering paper envelopes and cards with black or colored borders."

519. And to GEORGE REES, of Goswell Road, in the parish of Clerkenwell, Engineer, for the invention of "Improvements in the construction of marine sub-ways."

On both their petitions, recorded in the Office of the Commissioners on the 26th day of February, 1862

551. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in the manufacture of hats and bonnets."—A communication to him from abroad by Messieurs Louis Pierre Quenot and Henri Joseph Lebargy, of Paris, France.

On his petition, recorded in the Office of the Commissioners on the 28th day of February, 1862.

555. To JAMES SIM, of the city of Aberdeen, North Britain, Manufacturing Chemist, for the invention of "Improvements in the construction of gas meters."

556. To HENRY CHARLES MÜLLER, of Russell Place, New North Road, in the county of Middlesex, Furrier, for the invention of "Improvements in the manufacture of imitation bear skin caps."

559. And to PIERRE JOSEPH GUYET, of Paris, in the empire of France, Civil Engineer, for the invention of "Improvements in taps or valves."

On their several petitions, recorded in the Office of the Commissioners on the 1st day of March, 1862.

578. To THOMAS TILLAM, of Church Street, Deptford Green, in the county of Kent, Cremaline Manufacturer, for the invention of "An improved method of purifying gas."

On his petition, recorded in the Office of the Commissioners on the 3rd day of March, 1862.

585. To JOHN GJERS, of Middlesbrough, in the North Riding of the county of York, Engineer, for the invention of "A material or sand for the formation of moulds for casting iron and for other like purposes."

586. To James Ellis, of Petersham, in the county of Surrey, Farmer, for the invention of "Improvements in hooks and swivels for fastening chains of all sizes and for other similar purposes."

592. And to George Hallen Cottam, and Henry Richard Cottam, both of the St. Pancras Iron Works, Old St. Pancras Road, in the county of Middlesex, for the invention of "Improvements in horticultural buildings and other glazed structures."

On their several petitions, recorded in the Office of the Commissioners on the 4th day of March, 1862.

595. To John Sidebottom, of Harewood, near Mottram, in the county of Chester, Cotton Spinner and Manufacturer, for the invention of "Improvements in fire-arms and ordnance and in projectiles."

597. To John Somervell and Robert Miller Somervell, both of Netherfield, in the county of Westmoreland, and Marius Blanc, of Birmingham, in the county of Warwick, for the invention of "Certain improvements in the manufacture of boots and shoes."

599. To John Chubb, of St. Paul's Church Yard, in the city of London, Patent Lock and Safe Manufacturer, and Henry Mortimer Burton, of John's Place, Holland Street, Southwark, in the county of Surrey, Engineer, for the invention of "Improvements in apparatus for displaying or exhibiting jewellery and other valuable articles in glass cases."

601. To Edward Partington, of Heap Bridge, in the county of Lancaster, Manager, for the invention of "Certain improvements in the method of cleansing and preparing rags or other materials used in the manufacture of paper, and in machinery or apparatus connected therewith."

603. And to William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "An improved process and apparatus for reducing wood, straw, and other vegetable substances to pulp for the manufacture of paper."—A communication to him from abroad by John Reynolds Knox, of the city and state of New York, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 5th day of March, 1862.

607. To John George Shipley, of 181, Regent Street, in the county of Middlesex, Sadler and Army Accoutrement Maker, for the invention of "Improvements in bridle-heads, reins, and bits."

609. To Thomas Farrimond, of the city of Manchester, in the county of Lancaster, Mining Engineer, for the invention of "An improved safety cage for mines."

613. To Thomas Ball, William Ball, and John Wilkins, all of the Broadway, Nottingham, Manufacturers, for the invention of "Improvements in the manufacture of warp fabrics in warp machines."

616. To Richard Restell, of Croydon, in the county of Surrey, Watch Maker, for the invention of "Improvements in apparatuses for connecting and disconnecting carriages and engines on railways, as also signal lines between guard and driver."

617. And to Thomas Henton Wood, of Blackweir, in the county of Glamorgan, Gentleman, for the invention of "Improvements in apparatus employed in the manufacture of artificial fuel."

On their several petitions, recorded in the Office of the Commissioners on the 7th day of March, 1862.

621. To George Edmondson, of Queenwood, in the county of Southampton, for the invention of "Improvements in washing machines."

623. To William Paterson, William A. Sanderson, and Robert Sanderson, junior, of the firm of R. and A. Sanderson and Co., of Gala Mills, Galashiels, in the county of Selkirk, North Britain, for the invention of "Improvements in finishing woven fabrics."

627. To William Noy Wilkins, of Saint John's Wood, in the county of Middlesex, Artist, for the invention of "Improvements in the manufacture of pigments for oil and water colors."

629. To Samuel Grice, of Birmingham, in the county of Warwick, Engineer, for the invention of "An improvement or improvements in propellers for propelling ships and boats and other vessels."

631. To William Palmer, of Bell House, Southweald, in the county of Essex, for the invention of "Improvements in the manufacture of candles."

633. To Frederic Newton Gisborne, of No. 3, Adelaide Place, London Bridge, in the city of London, Engineer and Electrician, and Henry Wickens, of No. 4, Tokenhouse Yard, Bank, in the city of London, Gentleman, for the invention of "Improvements in the means of indicating the presence of fire damp or choke damp in mines, and of dispersing fire damp, and also of telegraphing in mines."

635. And to Francis Robert Newton, and Hiram Codd, both of Esher Street, in the city of Westminster, for the invention of "An apparatus for indicating and measuring the flow of liquids."

On their several petitions, recorded in the Office of the Commissioners on the 8th day of March, 1862.

637. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improvements in breech-loading firearms."—A communication to him from Salloum Dahdah, (of Lebanon in Syria), a person resident at St. Maur, (département de la Seine,) France.

641. To William Parker and George Henry Batman, of Copmanthorpe, in the county of York, for the invention of "Improvements in steam engines."

643. To William John Bennett, of 21a, Millbank Street, in the city of Westminster, Manager, for the invention of "An improved solution or preparation to be used with Portland and other cements for the production of artificial stone, or for building purposes."

645. To William Samuel Nosworthy, of 79, Coleman Street, in the city of London, Pianoforte Manufacturer, for the invention of "Improvements in upright and horizontal pianofortes."

647. To Jean Baptiste Gabriel Marie Frédéric Piret, of 29, Boulevart St. Martin, Paris, Civil Engineer, for the invention of "Improvements in lubricating apparatus."

649. And to Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for the invention of "An improvement in preparing hooks and hooks and eyes for sale or consumption."—A communication to him from abroad by the Société Gingembre et Damiron, of Paris, France.

On their several petitions, recorded in the Office of the Commissioners on the 10*th day of March*, 1862.

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651. To Robert Peacock, of the firm of Messrs. Peacock and Prattley, of the city of Manchester, Manufacturers and Printers, for the invention of "Improvements in the manufacture of window blinds."

653. To Edward Parfitt, of Drury Lane, in the county of Middlesex, Wine Merchant, for the invention of "A watch protector."

655. To Edward Humphrys, of Deptford, in the county of Kent, Engineer, for the invention of "Improvements in steam engines."

657. To Edwin Gillard Camp, of the city of Bristol, Hair Dresser, for the invention of "Improvements in brushes or apparatus for brushing."

660. To Henry Baynes, of the firm of Henry Baynes and Son, Stationers, of Clements Lane, in the city of London, for the invention of "An improvement in bankers' cheque books."

661. To Richard Smith, of Glasgow, in the county of Lanark, North Britain, Manufacturing Chemist, for the invention of "Improvements in telegraph posts."

663. And to William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in apparatus for effecting submarine operations."—A communication to him from abroad by Mr. Olivier Riou, of 29, Boulevart St. Martin, Paris, Merchant.

On their several petitions, recorded in the Office of the Commissioners on the 11*th day of March*, 1862.

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664. To Alphonse Rene Le Mire de Normandy, of Odin Lodge, King's Road, Clapham Park, in the county of Surrey, for the invention of "An improved method of connecting gas and other pipes."

667. To William Henry Latham, of Bolton, in the county of Lancaster, Foreman, and Frederick Cartwright Ward Latham, of the same place, Printer, for the invention of "Certain improvements in machinery or apparatus for perforating and numbering paper or other substances to be employed as 'tickets' or where other 'counter registration' is required."

669. To Archibald Watson, of Glasgow, in the county of Lanark, North Britain, Plumber and Brassfounder, for the invention of "Improvements in hot-pressing apparatus."

671. To William Conyers, of Leeds Bridge, Leeds, in the county of York, Currier and Leather Merchant, for the invention of "Improvements in currying leather."

675. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the manufacture of colored inks."—A communication to him from abroad by Mr. Annet Jacques Nadaud, of 29, Boulevart St. Martin, Paris, Merchant.

677. To John Edwin Grisdale, of 73, Oxford Street, in the county of Middlesex, Photographer, for the invention of "Improvements in photographic cameras, and in the mode of fixing the lens therein."

679. And to William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the manufacture of cartridges."—A communication to him from abroad by Elam Potter and Julius Pomeroy, both of the city and state of New York, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 12*th day of March*, 1862.

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688. To John Howard and John Bullough, of Accrington, in the county of Lancaster, Iron Founders and Machine Makers, for the invention of "Improvements in warping and beaming machines."

692. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in apparatuses for measuring and regulating the flow and pressure of gas, parts of which are applicable to hydraulic receivers and to steam generators."—A communication to him from abroad by Jean Claude Garnier, of Paris, France.

700. And to John Kent, of Moscow, in the kingdom of Russia, Hosier, at present residing at Hyson Green, Nottingham, in the county of Nottingham, for the invention of "Improvements in cleansing and bleaching."—Partly the result of a communication from abroad made to him by Theodor Schnebely, a person resident at Moscow aforesaid, and partly of invention and discovery made by himself.

On their several petitions, recorded in the Office of the Commissioners on the 13*th day of March*, 1862.

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706. To Ludwig Gabler, of No. 41, Bernard Street, and Maximilian Zingler, of No. 14, Granville Street, both in the county of Middlesex, for the invention of "Improvements in manufacturing articles from ivory and bone."

708. And to Alexander John Paterson, of the city of Edinburgh, Gentleman, for the invention of "Improvements in the construction of electric telegraph cables."

On both their petitions, recorded in the Office of the Commissioners on the 14*th day of March*, 1862.

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712. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "An improved brake for railroad carriages."—A communication to him from abroad by Augustine Irel Ambler, Attorney-at-law, Roseline Nancy Ambler, wife of the said Augustine Irel Ambler, and Warrick Martin, Banker, all of the city and county of Milwaukee, in the state of Wisconsin, United States of America.

720. To Henry Young Darracott Scott, of Brompton Barracks, near Chatham, in the county of Kent, Captain in the Royal Engineers, for the invention of "Improvements in the manufacture of cement."

722. To John Avery, of 26, Mark Lane, in the city of London, for the invention of "Improvements in purifying coal."—A communication to him from abroad by John Reed, a person resident at New York, United States of America.

724. To James Robey, of No. 49, Hereford Road North, in the county of Middlesex, for the invention of "Improvements in manufacturing and refining sugar, and in apparatus employed therein."

726. And to John Tomlinson Pendlebury, Blacksmith, and Thomas Pendlebury, Mechanic, both of Bury, in the county of Lancaster, for the invention of "An improved form of lubricator."

On their several petitions, recorded in the Office of the Commissioners on the 15*th day of March,* 1862.

730. To William Bury Lord, of Plymouth, in the county of Devon, Veterinary Surgeon Royal Artillery, and Frederic Hughes Gilbart, of Brixton, in the county of Surrey, Gentleman, for the invention of "Improved means or apparatus for raising, lowering, and releasing ships boats or other heavy bodies."

732. To William Bowser, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in ships' fire hearths or boiling and cooking apparatus."

734. To John Weems and William Weems, both of Johnstone, in the county of Renfrew, North Britain, Engineers, for the invention of "Improvements in apparatus for indicating the pressure or quantity, and in regulating the discharge of fluids."

736. To William Barford, of the firm of Amies and Barford, of Peterborough, in the county of Northampton, Agricultural Implement Makers, for the invention of "Improvements in rollers for rolling land."

738. To George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for the invention of "Improvements in cranks for driving sewing machines and other machinery."—A communication to him from abroad by Turner Williams, a person resident at Providence, state of Rhode Island, of the United States of North America."

740. To James Hicks, of Hatton Garden, in the county of Middlesex, Meteorological Instrument Maker, for the invention of "Improvements in mercurial barometers."

744. And to Thomas Myers, of Brighton, in the county of Sussex, Gentleman, for the invention of "Improvements in meters for measuring water, gas, or other fluids."

On their several petitions, recorded in the Office of the Commissioners on the 17*th day of March,* 1862.

748. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "An improved needle threading apparatus."—A communication from Jules Fouquet, a person resident at No. 18, Rue de Vaux, Vitry-le-François, (dépt. de la Marne,) in France.

752. To William Tongue, of Bradford, in the county of York, Engineer, for an invention of "Improvements in machinery and in processes for preparing, heckling, dressing, and combing flax, hemp, silk, and other fibrous materials."

756. To Joseph Anthony Ronketti, of 31, Northampton Road, Clerkenwell, in the county of Middlesex, Meteorological Instrument Maker, for the invention of "Improvements in meteorological instruments and thermometers."

758. To Samuel Slack, of West Street, New Sneinton, in the parish of Sneinton, in the county of Nottingham, Lacemaker, for the invention of "Improvements in the manufacture of stockings and other fabrics in circular knitting machines."

760. And to Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in the manufacture of barytes and barytic products, and the application of these substances in the manufacture of sugar and other uses."—A communication to him from abroad by Alfred Delaune, of Paris, France.

On their several petitions, recorded in the Office of the Commissioners on the 18*th day of March,* 1862.

762. To Alfred Krupp, of Essen, in Rhenish Prussia, Cast Steel Manufacturer, for the invention of "Certain improvements in the method of manufacturing shafts for steam boats and other purposes."

764. To Spendlove Desborough, of Noble Street, St. Martin's le Grand, in the city of London, Manufacturer, for the invention of "Improvements in the manufacture or construction of sewing or other needles."

766. To Sampson Moore, of Liverpool, in the county of Lancaster, Millwright, Engineer, and Iron Founder, for the invention of "Certain improvements in machinery for compressing and cutting tobacco."

768. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in reproducing or in producing copies of guipure, lace, embroidery, and other like articles."—A communication to him from abroad by Rosalie Clémentine Tillard, of Paris, France.

770. And to Richard Archibald Brooman, of 166 Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in apparatuses for drawing in and paying out chain cables, applicable to windlasses and capstans."—A communication to him from abroad by Jean Salette, of Marseilles, France.

On their several petitions, recorded in the Office of the Commissioners on the 19*th day of March,* 1862.

776. To Robert Martin Roberts, of Kensington, in the county of Middlesex, Mining Engineer, for the invention of "Improvements in obtaining and applying motive power."

On his petition, recorded in the Office of the Commissioners on the 20*th day of March,* 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

NOTICE is hereby given, that the petition of

818. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, praying for Letters Patent for the invention of "Certain improvements in machinery for the production of ornamental stitching or embroidery,"—a communication from Paul Nicolas Legris, a person resident at Jallaucourt, canton of Delme, (dept. de la Meurthe), in France,—was deposited and recorded in the Office of the Commissioners on the 24th day of March, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

LIST of LETTERS PATENT which passed the Great Seal on the

28th March 1862.

2281. JOSEPH BENNETT HOWELL, of the firm of Shortridge Howell & Co., Steel Manufacturers, of Sheffield, in the county of York, for an invention of "Improvements in the manufacture of chains and chain-cables."—Dated 13th September 1861.

2431. THOMAS SMITH, of Aberdeen Street, Sheffield, Optician, for an invention of "Improvements in the construction of umbrellas adapted to purposes of self-defence, some of which improvements are also applicable to other purposes."—Dated 30th September 1861.

2455. JAMES DAVIES, Iron master, Ulverston, in the county of Lancaster, and THOMAS EVANS, Engine fitter, Ulverston, in the county of Lancaster, for an invention of "Improvements in the construction of engines to be worked by steam, air, or gases."—Dated 2nd October, 1861.

2456. WILLIAM MALTBY, of De Crespigny Park, Camberwell, county of Surrey, Gentleman, for an invention of "Improvements in the manufacture of starch and starch-gum."—Dated 2nd October, 1861.

2458. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the manufacture of figured colored fabrics, and in machinery employed therein." — A communication to him from abroad by Edme Germain Bossuat of Paris, France.—Dated 2nd October, 1861.

2459. WALKDEN THOMPSON and THOMAS STATHER, of the Borough of Kingston-upon-Hull, Engineers, for an invention of "Improvements in hydraulic presses."—Dated 2nd October, 1861.

2462. CHARLES GREY HILL, of Commerce Square, High Pavement, in the town and county of the town of Nottingham, Lace Manufacturer, for an invention of "Improvements in machinery or in apparatus connected therewith in the manufacture of bonnet and cap fronts, rouches, and millinery, or other trimmings,"—Dated 2nd October, 1861.

2464. WILLIAM THOMAS HENLEY, of St. John's Street Road, Clerkenwell, in the county of Middlesex, Telegraph Engineer, for an invention of "Improvements in magnetic and electric telegraph apparatus, which are also applicable to other purposes."—Dated 3rd October, 1861.

2470. THOMAS EVANS, of Westmoreland Street, Westminster, in the county of Middlesex, Mechanic, for an invention of "Improvements in the manufacture of boots, shoes, and other coverings for the feet, and in the machinery, apparatus, and means connected with such manufacture."—Dated 3rd October, 1861.

2473. WILLIAM MALAM, of Skinner Street, in the city of London, Gas Engineer, for an invention of "Improvements in apparatus for the manufacture of gas."—Dated 3rd October, 1861.

2477. CHARLES HUSSON, of Nantes, in the empire of France, Looking Glass Manufacturer, for an invention of "An improved process for silvering looking glass in piles of several sheets superposed without interruption, which process consists in the use of a chemical powder."—Dated 4th October, 1861.

2478. ADOLPHE DAVID, junior, of Nantua, in the empire of France, for an invention of "Improvements in preparing and fixing street and other inscriptions or lettering on metallic plates."—Dated 4th October, 1861.

2487. JOHN LANSLEY, of Brown-Candover, in the county of Hants, Agricultural Machinist, for an invention of "Improvements in the construction of ploughs, drills, scarifiers, and such like agricultural implements, the said improvements relating to the mode of guiding or steering the same."—Dated 5th October, 1861.

2494. GEORGE NARES, of Portsmouth, in the county of Hants, Lieutenant R.N., for an invention of "An improved method of effecting communication between places otherwise inaccessible to each other, by means of kites, and an apparatus connected therewith."—Dated 5th October, 1861.

2538. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in apparatus for bending iron rails or bars."—A communication to him from abroad by Henri Nicolas Rogé, of 29, Boulevart St. Martin, Paris.—Dated 10th October, 1861.

2578. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the means or apparatus for closing and securing mail bags and other packages."—A communication to him from abroad by Jean Rémy Boubilla, of 29, Boulevart St. Martin, Paris, Post Office Employé. —Dated 16th October, 1861.

2625. FRANCIS ALTON CALVERT, of the city of Manchester, Engineer, for an invention of "Improvements in engines to be propelled by compressed atmospheric air or steam."—Dated 21st October, 1861.

2638. FREDERICK OLDFIELD WARD, of No. 6, Hertford Street, May Fair, London, in the county of Middlesex, for an invention of "Improvements in hydraulic presses, and in the machinery and apparatus appertaining thereto and requisite in working the same, part of such improvements relating to the pumping machinery attached to hydraulic presses, and this part being applicable to pumping machinery employed for other purposes."—Dated 22nd October, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 25th March*, 1862, *inclusive.*)

24th March.

765. Mark Firth, of the firm of Thomas Firth and Sons, of Sheffield, in the county of York, Steel Manufacturers and Merchants, for an invention of "Improvements in machinery for grinding saws and flat plates of steel."—A communication from E. T. Jones, residing in Montreal.—Dated 26th March, 1859.

768. Matthew Andrew Muir, of Glasgow, in the county of Lanark, North Britain, Machinist, and James McIlwham, of the same place, Machinist, for an invention of "Improvements in moulding or shaping metals."—Dated 26th March, 1859.

25th March.

781. John William Kelly, Civil Engineer, of the town of Ennis, in the county of Clare, Ireland, for an invention of "Improvements in gas-burners."—Dated 29th March, 1859.

786. Isaac Spight, of Glandford Briggs, in the county of Lincoln, Iron Founder and Agricultural Machine Maker, for an invention of "Improvements in horse hoes,"—Dated 29th March, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

24th March, 1862.

664. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for dressing flax, hemp, and other fibrous materials."—A communication from Jean Jacques Alexandre Lallier, of Evreux, and François Jules Vignaud, of Paris, both in the empire of France.—Dated 26th March, 1855.

709. William Tytherleigh, of Birmingham, in the county of Warwick, Clerk of Works, for an invention of "The application of a well known process to the covering of iron in sheets or bars with copper or copper alloys, whereby he produces a new and useful product."—Dated 30th March, 1855.

Patent on which the Stamp Duty of £100 has been Paid.

26th March, 1862.

663. John McKinnell, of Glasgow, in the county of Lanark, North Britain, Gentleman, for an invention of "Improvements in ventilation."—Dated 26th March, 1855.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March ,,
268	,, April to June ,,
291	,, July to September ,,
321	,, October to December ,,
345	A.D. 1854—January to March ,,
371	,, April to June ,,
399	,, July to September ,,
424	,, October to December ,,
451	A.D. 1855—January to March ,,
475	,, April to June ,,
505	,, July to September ,,
527	,, October to December ,,
553	A.D. 1856—January to March ,,
579	,, April to June ,,
605	,, July to September ,,
632	,, October to December ,,
660	A.D. 1857—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1858—January to March ,,
789	,, April to June ,,
815	,, July to September ,,
842	,, October to December ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632	A.D. 1852—October to December inclusive
660	A.D. 1853—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1854—January to March ,,
789	,, April to June ,,
815	,, July to September ,,
842	,, October to December ,,

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FOREIGN PATENTS.



AUSTRIA.*

List of Patents which were Granted, Prolonged, and became Void during the month of January, 1862.†

(*Communicated by the Austrian Government.*)

1. Patents Granted.

1. Andreas Weber, of Vienna, for "An ice apparatus for cooling barreled beer to the freezing point."—1 year.—(Secret.)—Dated 2nd January, 1862.

2. Carl Wacatka, of Prague, for "An apparatus for heating locomotives."—1 year.—(Secret.)—Dated 2nd January, 1862.

3. F. Neibe and H. Breiter, of Vienna, for "Fastenings of cigar cases and portemonnaies."—1 year. (Public.)—Dated 2nd January, 1862.

4. Anton Böhm, of Asch, in Bohemia, for "Improvements in machines for printing yarns."—1 year.—(Public.)—Dated 2nd January, 1862.

5. Barthelemy Picard, of Nancy, in France, represented by Fr. Rödiger, Vienna, for "Obtaining a fibrous substance from a native plant not used hitherto for industrial purposes."—1 year.—(Secret.)—Dated 5th January, 1862.

6. Heinrich Jasienski and Leopold Jasienski, of Lemberg, for "Manufacture of soda from common salt by using pyrites of sulphur."—2 years.—(Secret.)—Dated 5th January, 1862.

7. Jacob Poschinger, of Köstach, in Styria, for "New method of manufacturing barrels for guns and hand fire-arms from cast steel."—1 year.—(Secret.)—Dated 5th January, 1862.

8. Michael Janschegg, of Görz, for "A peculiar lock for doors."—5 years.—(Public.)—Dated 10th January, 1862.

9. Friedrich Wilhelm Höpfner, of Berlin, represented by Eduard Schmidt, Vienna, for "A process and peculiar apparatus for the manufacture of mash from corn or potatoes for the manufacture of spirits of wine, yeast, and beer."—1 year.—(Secret.)—Dated 10th January, 1862.

10. Nephtali Sternlicht, of Vienna, for "An apparatus for expeditiously composing and changing numbers, letters, and other marks for stamps."—1 year.—(Public.)—Dated 11th January, 1862.

11. Jacob Czihal, of Vienna, for "Improvements in the hand gears of the exchange pipes of water pipes."—1 year.—(Secret.)—Dated 11th January, 1862.

12. Carl Ponti, of Venice, for "A so-called 'Aletoscope,' for obtaining photographs on a large scale, and for producing effects similar to those of stercoscopes."—1 year.—(Public.)—Dated 11th January, 1862.

13. Gustav Sättler, of Vienna, for "A roller for advertisements."—1 year.—(Public.)—Dated 11th January, 1862.

14. Joseph Erlach, of Korpitsch, in Carinthia, for "A wheel with moveable paddles, which may be put into a rotary motion by water as well as by the wind."—1 year.—(Public.)—Dated 15th January, 1862.

15. Joseph Harrison, of Philadelphia, represented by G. Märkl, Vienna, for "A steam-tight closing of boilers, pipes, &c."—1 year.—(Public.)—Dated 15th January, 1862.

16. Adolph Brichta, of Prague, for "So-called 'Glycerine borax soap.'"—1 year.—(Secret.)—Dated 16th January, 1862.

17. Joseph Harrison, of Philadelphia, represented by G. Märkl, Vienna, for "An apparatus for preventing and removing incrustations of steam-boilers."—1 year.—(Public.)—Dated 16th January, 1862.

18. Jacob Hohenberg, of Ofen, for "Improvements in fastening buttons on dresses."—1 year.—(Secret.)—Dated 16th January, 1862.

19. Lambert Dacier, of Düren, in Prussia, represented by Fr. Paget, Vienna, for "A steam smoothing press."—3 years.—(Public.)—Dated 16th January, 1862.

20. Johann Jacob Rieter and Comp., of Winterthur, in Switzerland, represented by Aug. Schmidt, Vienna, for "Apparatus for accumulating water power."—4 years.—(Secret.)—Dated 16th January, 1862.—(Saxon Patent, 16th October, 1861.)

21. Franz Theyer, of Vienna, for "Ornamenting fancy articles by means of peculiar lattice-work."—1 year.—(Secret.)—Dated 16th January, 1862.

22. Jean Bapt. Hulard and Louis Guillaume Poupel, of Paris, represented by G. Märkl, Vienna, for "A new process for rendering stone and plaster hard and waterproof."—1 year.—(Secret.)—Dated 16th January, 1862.

23. Anton Hopfgartner, of Baden, represented by Carl Hopfgartner, Innsbruck, for "A combined welding and puddling furnace."—5 years.—(Secret.)—Dated 17th January, 1862.

24. Anna Grünwald, of Pest, for "Improvements in the manufacture of tallow candles, hard soap, cocoa nut soap, and palm oil soap, by means of a peculiar chemical lye."—1 year.—(Secret.)—Dated 18th January, 1862.

25. Alexand. Weisz, of Pest, for "Means of protecting foot coverings from the action of perspiration and dampness."—1 year.—(Secret.)—Dated 19th January, 1862.

* For the Austrian Patent Law, see No. 291 of this Journal.

† In the case of inventions patented in other states as well as in Austria, the Specifications (whether described as "public" or not) may in most cases be consulted, or translations of them be had, at the Library of the Commissioners' Office.

26. Wilhelm Mehner, of Meissen, in Saxony, represented by Samuel Weiss, Pest, for "A peculiar glue for bookbinders' work."—1 year.—(Secret.)—Dated 19th January, 1862.

27. Wilhelm Skallitzki, of Vienna, for "Manufacture of waterproof leather cloth."—1 year.—(Secret.)—Dated 19th January, 1862.

28. Leopold Köppel, of Vienna, for "An advertising column for night and day."—1 year.—(Secret.)—Dated 19th January, 1862.

29. Joachim Watzka, of Prague, for "A dstributing regulator and system of steam engines based thereon, whereby the waste steam of high pressure steam engines may be utilized."—1 year.—(Public.)—Dated 19th January, 1862.

30. Eugen Alexander Rouvière, of Paris, represented by G. Märkl, Vienna, for "A peculiar engine with differential pistons for raising water."—1 year.—(Public.)—Dated 19th January, 1862.

31. A. Müller and Comp., represented by Cornelius Kasper, Vienna, for "A peculiar process for extracting zinc from ores."—1 year.—(Secret.)—Dated 21st January, 1862.

32. C. Baumann, of Altdorf-Weingarten, Wurtemberg, represented by Dr. Jos Max Winiwarter, Vienna, for "A peculiar kind of buttons to be fastened on dresses by means of screws."—1 year.—(Secret.)—Dated 21st January, 1862.—(Wurtemberg Patent, 9th October, 1861.)

33. André Désiré Martin, of Rouen, and Prosper Verdat du Trembley, of Paris, represented by Friedrich Rödiger, Vienna, for "Improvements in apparatus employing expanded or compressed air for transmitting motive power, and especially for working railway breaks."—1 year.—(Secret.)—Dated 21st January, 1862.

34. Friedrich Rödiger, of Vienna, for "A new composition for oiling arbors, axles, and other movcable parts of machinery."—1 ycar.—(Secret.)—Dated 21st January, 1862.

35. Moriz Kohn, of Vienna, for "Improvements in electro magnetic bell signals."—1 ycar.—(Secret.)—Dated 22nd January, 1862.

36. Fried. Edmund Thode, of Dresden, represented by Aug. Schmidt, Vienna, for "An apparatus for pressings liquids from thick substances."—1 year.—(Secret.)—Dated 22nd January, 1862.—(Saxon Patent, 15th October, 1861.)

37. Gustav Winter, of Brünn, for "A self-acting coupling of railway carriages."—1 year.—(Public.)—Dated 18th January, 1862.

38. Sigmund Salzmann, of Vienna, for "A process for obtaining rectified fir oil."—1 year.—(Secret.)—Dated 21st January, 1862.

39. Carl F. G. Mayer, of Hernals, near Vienna, for "Improvements in removing the acid from rape oil, and in the manufacture of lubricating oil and lamp oil for drawing rooms."—2 years.—(Secret.)—Dated 21st January, 1862.

40. A. Maria Wegmaier, of Vienna, for "A mode of rendering wax applicable to the manufacture of lithographic pictures."—1 year.—(Secret.)—Dated 21st January, 1862.

41. Jno. Werner and Co., of Mannheim, represented by Herm. Schmelzer, Vienna, for "A peculiar glazing for wood."—1 year.—(Secret.)—Dated 21st Janury, 1862.

42. Alphons Müller de la Mothe, of Lausanne, in Switzerland, represented by Fr. Rödiger, Vienna, for "A process for refining and hardening iron and steel without forging and hammering."—1 year.—(Secret.)—Dated 21st January, 1862.

43. Anton Ehmann, of Vienna, for "Improvements in the construction of his Patent stoves and kitchen ranges."—1 year.—(Secret.)—Dated 21st January, 1862.

44. Paltauf and Company, of Vienna, for "A sewing for tambouring machine for working with one or two needles."—1 year.—(Secret.)—Dated 21st January, 1862.

45. Jean Marie Hospice Auguste Taurines, of Paris, represented by Fr. Rödiger, Vienna, for "A weighing apparatus applicable to weighing machines as well as to other balances."—1 year.—(Secret.)—Dated 21st January, 1862.

46. Johann Bürgl, of St. Ivan, in Hungary, for "A water-gauge for steam-boilers."—1 year.—(Public.)—Dated 24th January, 1862.

47. Carl Wesely, of Pilsen, for "A peculiar construction of single windows with double panes of glass."—1 year.—(Public.)—Dated 26th January, 1862.

48. Heinrich Goldscheider and Paul Portzia, of Arad, in Hungary, for "A so-called 'Universal hand-instrument for casting type.'"—2 years.—(Secret.)—Dated 26th January, 1862.

49. Escher-Wysz and Co., of Ravensburg, in Wurtemberg, represented by Dr. Joseph Neumann, Vienna, for "A peculiar loom for weaving fabrics of four different colours, or of four different kinds of yarn of the same or different colour, and of any pattern."—3 years.—(Public.)—Dated 26th January, 1862.

50. Escher-Wysz, and Co., of Ravensburg, in Wurtemberg, represented by Dr. Joseph Neumann Vienna, for "A peculiar loom for weaving fabrics of one or two colours, and also with two different wefts of the same or different colour and pattern."—3 years.—(Public.)—Dated 26th January, 1862.

51. Julia Deutsch, of Pest, for "A moveable safety apparatus for removing the fusel from spirits."—1 year.—(Secret.)—Dated 26th January, 1862.

52. Carl Funk, of Sonnenberg, in Prussia, represented by Anton Bretschneider, Prague, for "A peculiar process for reviving animal charcoal for the manufacture of sugar."—1 year.—(Secret.)—Dated 36th January, 1862.

53. Escher-Wysz and Co., of Ravensburg, in Wurtemberg, represented by Dr. Jos. Neumann, Vienna, for "A peculiar loom for weaving fabrics with six different colours, or with various yarns of the same or different colour, and of all kinds of designs and size."—3 years.—(Public.)—Dated 27th January, 1862.

54. Edward Clarence Shephard, of London, represented by Anton Schneider, Vienna, for "A gas carburator for increasing the illuminating

power of gas."—2 years.—(Public.)—Dated 27th January, 1862.

55. D. C. Chiodi, of Fünfhaus, near Vienna, assignee of Jos. Zochling, for "A peculiar machine for expeditiously obtaining dovetails in the manufacture of packing cases."—1 year.—(Secret.)—Dated 31st January, 1862.

Patents Prolonged.

1. Franz Schuler, for "A composition of resinous substances dissolved in pure spirits of wine for dry-rubbing floors."—6th year.—(Secret.)—Dated 20th February, 1857.

2. Stanislaus Chodzko, for "Manufacture of manure."—6th year.—(Public.)—Dated 28th March, 1857.

3. Carl Philipp Haussoullier and Carl Cogniet, for "A process for obtaining and purifying paraffine."—5th year.—(Secret.)—Dated 15th March, 1858.

4. Johann Bartholomäus Camillo Polonceau, for "Improvements in expansion engines."—4th year.—(Public.)—Dated 18th December, 1858.

5. Franz Rudinger, for "Improvements in sewing machines."—4th year.—(Secret.)—Dated 29th December, 1858.

6. Maria Alexander Emil Letestu, for "A peculiar system of pumps."—4th year.—(Public.)—Dated 28th February, 1859.

7. Dalifol and Co., for "Improvements in apparatus for utilizing waste steam."—3rd year.—(Secret.)—Dated 10th December, 1859.

8. Joseph Jacob, for "Improvements in using tungstenic ores for the manufacture of iron and steel."—4th year.—(Secret.)—Dated 21st December, 1859.

9. Moriz St. Genois and Ferdinand Lehner, for "A method for obtaining vinegar of wood, pyroligneous spirit, and tar, in the manufacture of charcoal."—4th year.—(Secret.)—Dated 21st December, 1859.

10. Ferdinand Fuchs, for "A pump apparatus."—2nd year.—(Secret.)—Dated 23rd January, 1861.

11. Johann Weber, for "Soap washing powder."—2nd year.—(Secret.)—Dated 23rd January, 1861.

12. Philipp Louis Aimé Stilmant and Louis Felix Anne Allain, for "A break for railway and other carriages."—2nd year.—(Secret.)—Dated 15th February, 1861.

13. Wilhelm Knaust, for "New cocks for fire engines, pumps, and other similar machines."—11th year.—(Secret.)—Dated 17th December, 1851.

14. Heinrich Daniel Schmid, for "Improvements in certain parts of common weighing machines resting on walls."—9th year.—(Public.)—Dated 22nd December, 1853.

15. Johann Parger, for "Improvements in his indigo varnish blacking."—5th year.—(Secret.)—Dated 24th December, 1857.

16. Ignaz Michael Firnstahl, for "Improvements in his Patent eccentric double printing machine."—4th year.—(Secret.)—Dated 23rd December, 1858.

17. Jean Antoine De Maniquet, for "Improvements in apparatus for spinning, doubling, and twisting fibrous substances."—2nd year.—(Public.)—Dated 28th January, 1861.

18. Ignaz Michael Firnstahl, for "A double printing machine for printing fabrics from below."—4th year.—(Secret.)—Dated 31st December, 1858.

19. Moriz Fröhlich and Enoch Bloch, for "Improvements in the manufacture of pressed yeast."—4th and 6th years.—(Secret.)—Dated 21st June, 1859.

20. Pierre Prosper Pimont, for "A plastic anti-heat composition for coating metallic heating surfaces."—2nd year.—(Secret.)—Dated 28th January, 1861.

21. Alexand. Charles Louis Devaux, for "Granaries with ventilators."—2nd year.—(Secret.)—Dated 13th June, 1861.

22. François Charles Lepages, for "Indurated wood for the manufacture of various utensils, furniture, and other articles."—8th year.—(Secret.)—Dated 11th June, 1856.

23. Wilhelm Niebauer, for "Oil for the hair."—6th year.—(Secret.)—Dated 9th December, 1856.

24. Theresia Kamauf, for "An evaporating apparatus."—6th year.—(Secret.)—Dated 10th December, 1856.

25. Heinrich Gustav Alexander Guillaume, Achilles Nepomuk Grenier, and Carl Goschler, for "A new system of railway chairs of rolled iron."—5th year.—(Public.)—Dated 24th December, 1857.

26. Franz Roch, for "So-called 'Brilliant Patent starch.'"—5th year.—(Secret.)—Dated 1st January, 1858.

27. Digney, Brothers, and Co., for "Improvements in Morse's telegraphic apparatus."—4th year.—(Public.)—Dated 5th January, 1859.

28. Joseph August Lagard, for "A peculiar process for obtaining and reviving animal charcoal."—4th year.—(Public.)—Dated 17th February, 1859.

29. Joseph Harrison, for "A peculiar construction of cast spherical steam stoves."—3rd year.—(Secret.)—Dated 17th December, 1859.

30. Albert Eckstein, for "Manufacture of grease for lubricating."—3rd year.—(Secret.)—Dated 19th December, 1859.

31. René Prudent Patrice Dagron, for "A peculiar microscopic apparatus."—3rd year.—(Secret.)—Dated 3rd May, 1860.

32. Wenzel Kott, for "Improvements in Hensmann's thrashing machine."—2nd year.—(Public.)—Dated 25th January, 1861.

33. Martin Quaust, for "Charring wicks for tallow candles."—2nd year.—(Secret.)—Dated 25th January, 1861.

34. Pierre Raimond Huguet, for "An apparatus for numbering silk and other fibrous substances." —2nd year.—(Public.) — Dated 28th January, 1861.

35. Louis Coignard, for "An hydraulic motive engine, called 'Aquamotor.'" —2nd year.—(Secret.)—Dated 30th May, 1861.

6. Dr. Franz Bikl, for "A mode of utilizing the pressure of atmospheric air for obtaining a rotary motion."—3rd year.—(Secret.)—Dated 16th December, 1859.

37. Carl Schinz and Dr. Carl Clemm-Lennig, for "A peculiar glass melting furnace." — 3rd and 5th years.—(Secret.)—Dated 8th January, 1860.

38. Joseph Knirsch, for "A peculiar plane for the manufacture of pegs for shoes."—5th year.—(Secret.)—Dated 28th January, 1858.

39. Hypolit Monier, for "Improvements in gas burners."—4th year.—(Secret.)—Dated 26th February, 1859.

40. Julius Modest Graf Regis, for "An electric apparatus applicable to Jacquart looms for weaving figured stuffs."—4th year.—(Secret.)—Dated 1st April, 1859.

41. Anton Grivel, for "A break for carriages, and especially for railway carriages."—2nd year.—(Secret.)—Dated 21st February, 1861.

42. Johann Baptist Vergne, for "Improvements in ships' screws."—5th year.—(Public.)—Dated 21st April, 1858.

43. Joseph Dobsch, for "Improvements in the manufacture of hats."—4th year. — (Secret.)—Dated 4th January, 1859.

44. Johann Ludw. Rolland, for "Improvements in apparatus for the manufacture of bread, biscuit, pastry, and similar food."—11th to 15th years.—(Secret.)—Dated 5th February, 1852.

45. Tony Petitjean, for "A new process for silvering mirrors."—7th year.—(Secret.)—Dated 23rd January, 1856.

46. Wenzel Eichler, for "A means of removing fusel from spirits."—3rd year.—(Secret.)—Dated 7th January, 1860.

47. Leander Watzl, for "An apparatus for obtaining a synoptical view of business transactions, sales, &c."—3rd year. — (Secret.) — Dated 16th January, 1860.

48. Joseph Von Rosthorn, for "An alloy of copper, zinc, tin, and iron."—2nd and 3rd years.—(Public.)—Dated 23rd January, 1861.

49. Joseph Von Kliegel, for "A peculiar mowing machine with special cutters."—2nd year.—(Secret.)—Dated 4th January, 1860.

50. David Franz Ludw. Rouchet, for "A rotary machine for transmitting motive power, compressing air, which may also be used as a steam engine, pump, or hydraulic wheel."—3rd year.—(Secret.)—Dated 24th February, 1860.

51. André Desiré Martin and Prosper Verdat du Trembley, for "Apparatus for using expanded or compressed air for transmitting motive power, and especially for breaks of railway and other carriages."—2 years.—(Secret.)—Dated 23rd January, 1861.

52. Ferdinand Vendelin Kleist, for "Improvements in oil and grease for lubricating machinery."—2 years.—(Secret.)— Dated 28th January, 1861.

53. Constant Jouffroy-Dumery, for "An apparatus for extracting solid and viscous substances from water and other liquids." — 2nd year.—(Secret.)—Dated 26th March, 1861.

54. Johann Baptist Pascal, for "A machine for using the expansive power of a mixture of steam, air, and gas, produced by combustion, as a motive power." — 8th year. — (Secret.) — Dated 24th March, 1855.

55. Jean Baptiste Pascal and Co., for "Improvements in machines for obtaining motive power by means of a mixture of steam and hot air or gas, produced by combustion." — 7th year.—(Public.)—Dated 7th January, 1856.

56. Joseph Pohlmann, for "So-called 'Heliantine cosmetic.'"—6th year. — (Secret.) — Dated 10th January, 1857.

57. Johann Heinrich Wilhelm Daniel Wagner, for "An apparatus for purifying, heating, and filtering the feed water of steam-boilers." —4th year.—(Secret.)—Dated 13th April, 1859.

58. Thonet, Brothers, for "A peculiar construction of wheels of carriages."—3rd year.—(Secret.) —Dated 8th January, 1860.

59. Siegfried Marcus, for "A new system of dial telegraphs."—2nd year. — (Secret.) — Dated 25th January, 1861.

60. Johann Buscany, for "Improvements in machines for cutting ladies' dresses."— 4th year. —(Secret.)—Dated 8th July, 1858.

61. Daniel Hooibrenk, for "A process for promoting ventilation of the soil by means of pipes." —6th year.—(Public.)—Dated 19th January, 1857.

62. F. G. Rietsch, for "A peculiar apparatus for evaporating all kinds of liquids."—4th year.—(Secret.)—Dated 18th December, 1858.

63. Paul Ragaller, for "A peculiar construction of smokeless malt kilns."—4th year.—Public.)—Dated 13th January, 1859.

64. Jean Pierre Lies-Bodard, for "A composition called 'Licine,' being a substitute for albumen in calico printing."—2nd year.—(Secret.)—Dated 28th January, 1861.

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3. Patents which have become Void.*

1. Laurenz Altlechner, for "Improvements in paving streets and footways." — Dated 25th July, 1855; expired 5th July, 1861.

2. John Baillie, for "Improvements in the manufacture of cast-iron wheels of railway carriages."— Dated 10th July, 1854; expired 10th July, 1861.

3. Johann Daniel Colladon, for "Self-floating water-wheels."—Dated 10th July, 1856; expired 10th July, 1861.

4. Constant Von Göethen, for "Improvements in magneto-electric machine." —Dated 12th July, 1856; expired 12th July, 1861.

* The Specifications of these Patents may be consulted in the original language, or translations be had at the Public Free Library.

5. Matter Michel, for "A process for winding off silk from cocoons by means of steam."—Dated 27th July, 1856; expired 27th July, 1861.

6. Johann Wünsch, for "An apparatus for moving cylinders of rolling mills forwards and backwards."—Dated 27th July, 1856; expired 27th July, 1861.

7. Giulio Richard, for "Improvements in distilling peat by using superheated steam."—Dated 27th July, 1856; expired 27th July, 1861.

8. Eduard Fritsch, for "Obtaining photographs on canvass for painting."—Dated 8th July, 1858; expired 8th July, 1861.

9. Carl Perl, for "Manufacture of lubricating grease from the products of the dry distillation of wood."—Dated 10th July, 1858; expired 10th July, 1861.

10. Johann Caselli, for "A so-called 'Pantelegraph.'"—Dated 12th July, 1858; expired 12th July, 1861.

11. Franz and Carl Perl, for "A distilling apparatus and fire-place for the manufacture of resinous oil."—Dated 15th July, 1858; expired 15th July, 1861.

12. Carl Girardet, for "A cylindrical shaft bearer of carriages."—Dated 15th July, 1858; expired 15th July, 1861.

13. William Terry, for "Improvements in breech-loading fire-arms."—Dated 15th July, 1858; expired 15th July, 1861.

14. Beruh-Kirchlehner, Sons, for "Assembling straps by means of cement and wooden pegs."—Dated 26th July, 1858; expired 26th July, 1861.

15. Ignaz Wottlitz, for "Manufacture of cast steel by smelting the residue of wrought iron with other substances, and casting the same."—Dated 30th July, 1858; expired 30th July, 1861.

16. Wilhelm and Joh. Banks, for "An apparatus for bleaching, washing, scouring, and dyeing cotton, flax, and other vegetable raw substances or articles made thereof, and of rags."—Dated 8th July, 1859; expired 8th July, 1861.

17. Anton Proksch, for "A waterproof paint for wood, &c., and for fruit trees."—Dated 8th July, 1859; expired 8th July, 1861.

18. Conrad Otto, for "Improvements in shower baths."—Dated 12th July, 1859; expired 12th July, 1861.

19. Ferdinand Knesy, for "Sheet-iron forms for the manufacture of double biscuit."—Dated 13th July, 1859; expired 13th July, 1861.

23. Georg Fusenegger, for "Improvements in his Patent cocks."—Dated 16th July, 1859; expired 16th July, 1861.

21. Carl Modl, for "Improvements in mills."—Dated 21st July, 1859; expired 21st July, 1861.

22. Anton Ehmann, for "Improvements in the construction of stoves, ranges, and other heating and firing articles by hot air."—Dated 22nd July, 1859; expired 22nd July, 1861.

23. August Leonhardi, for "A liquid extract of ink."—Dated 25th July, 1859; expired 25th July, 1861.

24. Card Ludw. Joseph Diericks, for "Improvements in adjusting gold and silver flanchets."—Dated 25th July, 1859; expired 25th July, 1861.

25. Mathias Krammer, for "A peculiar earth borer."—Dated 1st July, 1860; expired 1st July, 1861.

26. Joseph Schreiber, for "Improvements in the manufacture of glass shades."—Dated 1st July, 1860; expired 1st July, 1861.

27. Eduard Kraus and Leopold Sonnenwald, for "A mode of imparting any degree of elasticity to tempered steel."—Dated 1st July, 1860; expired 1st July, 1861.

28. Franz Kernreuter, for "Improvements in parallel vices."—Dated 1st July, 1860; expired 1st July, 1861.

29. Eduard Kraus, for "Improvements in looms with steel healds."—Dated 1st July, 1860; expired 1st July, 1861.

30. Albert François Romain Delannoy, for "A grease box for lubricating pivots and axles."—Dated 3rd July, 1860; expired 3rd July, 1861.

31. Friedrich Edmund Thode, for "Improvements in pulp strainers."—Dated 3rd July, 1860; expired 3rd July, 1861.

32. Julius August Vollmer, for "A safety valve for all kinds of steam boilers."—Dated 5th July, 1860; expired 5th July, 1861.

33. Anton Ischwandtner, for "A heating apparatus applicable to kitchen ranges and boilers and to all kinds of fuel."—Dated 6th July, 1860; expired 6th July, 1861.

34. Carl Girardet, for "A regulator of tenters."—Dated 11th July, 1860; expired 11th July, 1861.

35. Ignaz Eisenberger, for "Improvements in the manufacture of chenille articles of cotton, wool, silk, and mohair."—Dated 14th July, 1860; expired 14th July, 1861.

36. Julius Von Mannstein, for "Improvements in packing furniture and other domestic utensils."—Dated 15th July, 1860; expired 15th July, 1861.

37. Tobias Joseph Schmidt and Wenzel Lodes, for "Means of preserving wine, beer, &c."—Dated 15th July, 1860; expired 15th July, 1861.

38. Johann Rattich and Son, for "A machine for the manufacture of pegs."—Dated 16th July, 1860; expired 16th July, 1861.

39. Eduard Cormier, for "A peculiar means of preserving eggs."—Dated 17th July, 1860; expired 17th July, 1861.

40. Catterino Catterini, for "A peculiar wine press."—Dated 17th July, 1860; expired 17th July, 1861.

41. F. A. Sarg, for "Coloured and white glycerine paper."—Dated 17th July, 1860; expired 17th July, 1861.

42. Carl Völkner and Reiner Daelen, for "A peculiar puddling furnace for the manufacture of raw steel and wrought iron from pig-iron through the action of carbonized gas."—Dated 19th July, 1860; expired 19th July, 1861.

43. JULIUS HILLER, for "A machine for rolling barley, and a self-emptying apparatus."—Dated 19th July, 1850; expired 19th July, 1861.

44. JALOREAU, Brothers, for "Improvements in the manufacture of pipes from rolled asphalt paper tissues, &c."—Dated 19th July, 1850; expired 19th July, 1861.

45. BERNHARD LUDWIG, for "Peculiar washing machines."—Dated 22nd July, 1860; expired 22nd July, 1861.

46. EDUARD STRENGSMANN, for "A registering apparatus for omnibuses."—Dated 22nd July, 1860; expired 22nd July, 1861.

47. CARL A. VEHRHAN, for "A smoke-consuming apparatus for coal and brown-coal."—Dated 26th July, 1860; expired 26th July, 1861.

48. GUSTAV FICHTNER, for "Expeditious guns."—Dated 26th July, 1860; expired 26th July, 1861.

49. CARL REISZER and CAROLINE REISZER, for "A hair dye called 'Crynochrome.'"—Dated 28th July, 1860; expired 28th July, 1861.

50. HEINRICH BOUGLEUX, for "Obtaining a three-fold produce in mills with common millstones by means of double ventilation."—Dated 1st August, 1860; expired 1st August, 1861.

51. NICOLAUS SCHLUMBERGER and Co., for "Machines for preparing, drawing, combing, and cleaning cotton and similar fibrous substances."—Dated 10th August, 1846; expired 10th August, 1861.

52. CARL SCHUH, for "Apparatus for the manufacture of high reliefs and round plastic objects by moulds of gutta percha."—Dated 30th August, 1852; expired 30th August, 1861.

53. MARCUS KAPPER, for "A peculiar mode of spinning lace-work."—Dated 31st October, 1859; expired 31st October, 1861.

54. FERDINAND OPITZ, for "Improvements in hand-embossing presses."—Dated 27th October, 1860; expired 27th October, 1861.

55. IGNAZ ZECHEL, for "Improvements in machines for the manufacture of wooden pegs."—Dated 24th March, 1861; disclaimed 3rd January, 1862.

COLONIAL PATENT LAW.

QUEENSLAND.

No Patent Laws have been enacted in the Colony of Queensland since its separation from New South Wales, but the Colonial Act (New South Wales) 16 Victoria, No. XXIV. (*see* No. 386 of this Journal) was continued in force in the Colony by an Order in Council of the 6th November, 1859.

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No. 860. TUESDAY, APRIL 1, 1862. Price 2d.

Applications for Letters Patent.

(*28th, 29th, and 31st March*, 1862.)

861. GEORGE ALLCROFT, of 2, Church Row, Camberwell, in the county of Surrey, for an invention of "Improvements in pressure and vacuum gauges."—Dated 28th March, 1862.

862. JAMES JONES, of Mersey Bank, Warrington, in the county of Lancaster, Engineer, for an invention of "Improvements in apparatus for raising and forcing liquids."—Dated 28th March, 1862.

863. WILLIAM AUSTIN ASHE, of Bolton Place, in the county of Middlesex, Gentleman, for an invention of "An improved mode of and apparatus for driving the propelling shafts of ships or vessels."—A communication to him from abroad by Edward David Ashe, of Quebec, in Lower Canada.—Dated 28th March, 1862.

864. WILLIAM BRYER NATION, Analytical Chemist, of Bagley Works, Battersea, in the county of Surrey, for an invention of "Improvements in manufacturing boxes or cases, and in the machinery or apparatus employed therein."—Dated 28th March, 1862.

865. ROBERT ALEXANDER OWEN, of the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in feathering and varying the pitch of screw propellers for steam ships."—Dated 28th March, 1862.

866. EUGENE THEODORE NOUALHIER, of Paris, Manufacturer, for an invention of "An improved ventilator."—Dated 28th March, 1862.

867. ANTONIO LUCETTI, of the city of Glasgow, North Britain, Confectioner, of an invention of "Improvements in apparatus for expressing the juice from pulpy fruit.—Dated 28th March, 1862.

868. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in chaff cutters."—A communication to him from abroad by Auguste Bernard Albaret, of Paris, in the empire of France, Mechanician.— Dated 28th March, 1862.

869. EDMUND SMITH, of Hamburg, Gas Meter Manufacturer, for an invention of "Improvements in wet gas meters."—Dated 28th March, 1862.

870. ROBERT LUBLINSKI, of 183 and 185, City Road, London, E.C., Stick Manufacturer, for an invention of "An improved method of jointing crutch hooks on umbrellas or walking canes."—Dated 28th March, 1862.

871. ROBERT KAY, of Castleton Print Works, Blue Pits, in the county of Lancaster, Calico Printer, for an invention of "Certain improvements in printing calicoes and other surfaces, and in apparatus connected therewith."—Dated 29th March, 1862.

872. JOHN BOUCHER, of No. 3, Surrey Villas, Camberwell New-Road, in the county of Surrey, Gentleman, for an invention of "Improvements in rifled ordnance and fire arms, and in the projectiles to be used therewith."—Dated 29th March, 1862.

873. YOUNGS PARFREY, of Upper Belgrave Place, Pimlico, in the county of Middlesex, Engineer, for an invention of "Improvements in breech loading fire-arms."—Dated 29th March, 1862.

874. WILLIAM CLARKE, of Gateshead, in the county of Durham, Engineer, for an invention of "Improvements in apparatus for casting."—Dated 29th March, 1862.

875. ISRAEL MORRIS, of Essington, near Wolverhampton, in the county of Stafford, for an invention of "A new or improved machine for breaking up or cultivating land."—Dated 29th March, 1862.

876. CHARLES HENRY TOWNSEND, JAMES YOUNG, and JAMES HANKINS, all of the city of

Bristol, for an invention of "Removing and preventing incrustation in steam boilers."— Dated 29th March, 1862.

877. Narcissus Smith, of No. 4, Great Quebec Street, Montague Square, in the county of Middlesex, for an invention of "An improved fire engine."—Dated 29th March, 1862.

878. William Glass, of 37, Prince's Street, Stamford Street, Lambeth, for an invention of "Improvements in the treatment of sulphuret of antimony and in obtaining products therefrom."—Dated 29th March, 1862.

879. Thomas Cole, of the city of Coventry, Licensed Victualler, for an invention of "Improvements in the manufacture of figured ribbons and other textile fabrics."—Dated 29th March, 1862.

880. William Paterson, of Glasgow, in the county of Lanark, North Britain, Manufacturing Chemist, for an invention of "Improvements in the manufacture of iodine."—Dated 29th March, 1862.

881. Richard Smith, of Shaw House, Melksham, in the county of Wilts, Gentleman, and of Pensile, in the parish of Minchinhampton, in the county of Gloucester, for an invention of "Improvements in roller blind apparatus."— Dated 29th March, 1862.

882. John Baker, of Devonshire Grove, Old Kent Road, in the county of Surrey, Manufacturing Cook and Confectioner, for an invention of "Improved alimentary preparations."— Dated 29th March, 1862.

883. Emanuel Bernard Hart, of New York, in the United States of America, but now residing in London, for an invention of "Improved machinery for cutting cork so as to render the same suitable for stuffing purposes."—A communication to him from abroad by Isachair Zacharie, resident at New York aforesaid.—Dated 29th March, 1862.

884. John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for an invention of "Improvements in carding engines."—Dated 29th March, 1862.

885. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved mode of applying acoustic apparatus in churches and other buildings and apartments."—A communication to him from abroad by David Durham Stelle, of New Brunswick, and Abram Van Arsdale, of Newark, both in the state of New Jersey, United States of America.—Dated 29th March, 1862.

886. John Clinton, of 35, Percy Street, Tottenham Court Road, in the county of Middlesex, Professor of Music, for an invention of "Improvements in flutes."—Dated 31st March, 1862.

887. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "The manufacture of glucose or fermentable sugar from a vegetable product not hitherto used for that purpose."—A communication to him from Martial Victor Jouannet, a person resident at the Faurelles Commune, of Jurignac, (dépt. de la Charente), in France.—Dated 31st March, 1862.

888. John Jordan, of Liverpool, in the county of Lancaster, Engineer and Surveyor of Iron Ships, for an invention of "Improvements in the construction of armour plated vessels or other like structures."—Dated 31st March, 1862.

889. Robert Young, of Glasgow, in the county of Lanark, North Britain, Millwright and Engineer, for an invention of "Improvements in apparatus for cleaning, separating, washing, and drying grain."—Dated 31st March, 1862.

890. Nathan Frankenstein, of 12, Clarendon Villas, Mildmay Park, London, in the county of Middlesex, for an invention of "The cutting of all kinds of corks, both pointed, conical, and cylindrical."—A communication to him from abroad by Mr. H. Hubert, of Linden, Hanover.—Dated 31st March, 1862.

891. William Tyler, of Birmingham, in the county of Warwick, Corn Dealer, for an invention of "A new or improved mixture or composition for feeding dogs and other animals and poultry."—Dated 31st March, 1862.

892. William Henry Hook, of Walworth, in the county of Surrey, for an invention of "Improvements in folding envelopes and paper, and in machinery or apparatus employed therein."—Dated 31st March, 1862.

893. Joseph Page Woodbury, of the city of Boston, in the county of Suffolk, in the commonwealth of Massachusetts, one of the United States of America, for an invention of "An improvement in arming war vessels."—Complete specification.—Dated 31st March, 1862.

894. William Barry Lord, of Plymouth, in the county of Devon, Veterinary Surgeon, Royal Artillery, and Frederic Hughes Gilbert, of Brixton, in the county of Surrey, Gentleman, for an invention of "An improved hame slip for suddenly releasing horses and other cattle from their harness, also applicable for releasing heavy bodies or weights."—Dated 31st March, 1862.

895. William Barry Lord, of Plymouth, in the county of Devon, Veterinary Surgeon, Royal Artillery, and Frederic Hughes Gilbart, of Brixton, in the county of Surrey, Gentleman, for an invention of "Improvements in loading firearms."—Dated 31st March, 1862.

896. Richard Burley, of Lower Thames Street, in the city of London, Iron and Brass Founder, for an invention of "An improved material for forming or lining the bearing of axles and shafts, and other rubbing parts of machinery."—Dated 31st March, 1862.

897. Robert Charles Ransome, of Ipswich, in the county of Suffolk, for an invention of "Improvements in thrashing and other machinery where corn or grain is required to be raised from one level to another."—Dated 31st March, 1862.

898. Robert Nightingale, of Maldon, in the county of Essex, Artist, for an invention of "Improvements in markers, butts, or mantelets."—Dated 31st March, 1862.

899. Léonce Bernard Schmolle, of Upper John Street, Golden Square, in the county of Middlesex, Importer of French Goods, for an invention of "Improvements in the construction of crinolines or steel skirts."—Dated 31st March, 1862.

900. John Harding, of Beeston Manor Iron and Coal Works, Leeds, in the county of York, Engineer and Iron Master, for an invention of "Improvements in the application of the waste heat arising from coke ovens for heating air for blast furnaces, also for calcining iron stone and other minerals, and for heating and smelting iron."—Dated 31st March, 1862.

901. James Moore Clements, of Birmingham, in the county of Warwick, Tailor and Draper, for an invention of "Certain improvements in sewing machines for performing the various kinds of work necessary in stitching, button and eyelet-hole working, embroidery, and sewing generally."—Dated 31st March, 1862.

902. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in rotatory engines."—A communication to him from abroad by Wilhelm Heinrich Christian Voss, of Berlin, in the kingdom of Prussia, Engineer.—Dated 31st March, 1862.

903. Henry Pooley junior, of the firm of Henry Pooley and Son, of Liverpool, Engineer, for an invention of "Improvements in the construction of weighing machines and weigh bridges."—Dated 31st March, 1862.

904. William McIntyre Cranston, of 58, King William Street, in the city of London, for an invention of "Improvements in machinery for cutting corn and other crops."—A communication to him from abroad by James Smith Thayer, a person resident at New York City, United States of America.—Dated 31st March, 1862.

Notices to Proceed.

Notice is hereby given, that

2890. James Moore Clements, of Birmingham, in the county of Warwick, Tailor and Draper, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in the making or manufacturing of certain parts of garments for either sex, likewise in the manner of preparing the same for sale, as also an improved button, to be attached to garments without sewing."

2893. And Pierre André, Jean François Pline Faurie and Joseph Pierre Richard, all of Bourdeaux, in the empire of France, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for preparing or manufacturing fuel."

2895. And Martin Dadd Rogers, of 2, Bow Lane Cottages, St. Leonard's Road, Bromley, in the county of Middlesex, has given the like notice in respect of the invention of "An improved chain cable stopper or controller."

As set forth in their respective petitions, all recorded in the said office on the 18*th day of November*, 1861.

2904. And Jesse Lee, of Church Gate, in the borough of Leicester, Engineer, has given the like notice in respect of the invention of "Improvements in the construction of the wheels of traction engines, and in the mode of adaptation to such engines."

As set forth in his petition, recorded in the said office on the 19*th day of November*, 1861.

2915. And Joseph Cooper Croxford, of 3, Chapel Row, Exmouth Street, Clerkenwell, in the county of Middlesex, has given the like notice in respect of the invention of "An improved mode of fastening doors, and for other similar purposes."

2916. And William Podmore Bayliss, of the Lloyds, in the parish of Madeley, in the county of Salop, Civil and Mining Engineer, has given the like notice in respect of the invention of "Improvements applicable to buildings in order to facilitato the extinguishing of any conflagration which may happen therein."

2917. And Francis Puls, of No. 25, Francis Terrace, Hackney Wick, in the county of Middlesex, Chemist, has given the like notice in respect of the invention of "Improvements in treating fatty and oily matters."

As set forth in their respective petitions, all recorded in the said office on the 20*th day of November*, 1861.

2923. And James Harrow Jeffs, of Tottenham Court Road, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in the manufacture of collars, shirt-fronts, cuffs, hats, bonnets, vests, and other articles of wearing apparel."

2928. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in rotary engines."—A communication to him from abroad by John Benjamin Root, of New York City, in the United States of America.

As set forth in their respective petitions, both recorded in the said office on the 21*st day of November*, 1861.

2931. And Alfred Fernandez Yarrow, Engineer, of Arundel Square, Barnsbury, and James Bracebridge Hilditch, Gentleman, of Barnsbury Villas, both in the county of Middlesex, have given the like notice respect of the invention of "Improvements in locomotive steam carriages for common roads."

2933. And Renil De Clercq and Emile Chazelles, of Brussels, in the kingdom of Belgium, Mechanical Engineers, have given the like notice in respect of the invention of "Improvements in apparatus for raising and supplying water to boilers, and for other purposes."

2939. And William Evans, of Commercial Road East, in the county of Middlesex, Master Mariner, has given the like notice in respect of the invention of "Improvements in obtaining motive power by machinery."

As set forth in their respective petitions, all recorded in the said office on the 22*nd day of November*, 1861.

2944. And John Weems, of Johnstone, in the county of Renfrew, North Britain, Tinsmith, has given the like notice in respect of the invention of

"Improvements in the manufacture of metallic tubes, and in coating or plating metals."

2948. And William Bray, of Abinger Road, Lower Road, Deptford, in the county of Kent, Engineer, has given the like notice in respect of the invention of "An improved locomotive apparatus, particularly adapted to agricultural purposes."

2950. And Fédor De Wyldé, 10, Great College Street, Camden Town, London, has given the like notice in respect of the invention of "Improvements in paper-making machinery."—A communication to him from abroad by Luis Dupont, Nancy, in the empire of France."

As set forth in their respective petitions, all recorded in the said office on the 23rd day of November, 1861.

2952. And Jean Baptiste Hulard and Louis Guillaume Poupel, of Paris, France, Gentlemen, have given the like notice in respect of the invention of "An improved process for hardening stones and plaster of Paris, and making them impervious to water."

2957. And William Burgess, of Newgate Street, in the city of London, Manufacturer, has given the like notice in respect of the invention of "Improvements in reaping and mowing machines,"

2960. And John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for shelling and cleaning rice and other grain."—A communication to him from abroad by Wellington Lee, of New York, in the United States of America.

2964. And Phineas Cowan, of the firm of L. Cowan and Sons, of Barnes, in the county of Surrey, Animal Charcoal Manufacturers, has given the like notice in respect of the invention of "A mode of utilizing the waste heat of furnaces used in re-burning animal charcoal."

As set forth in their respective petitions, all recorded in the said office on the 25th day of November, 1861.

2969. And Robert Harcourt, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "An improvement or improvements in fastening knobs to doors, drawers, and other articles, and in connecting knobs to spindles."

As set forth in his petition, recorded in the said office on the 26th day of November, 1861.

2981. And François Frédérick Dumarchey, of Boulevart de Strasbourg, in the city of Paris, in the empire of France, Engineer, has given the like notice in respect of the invention of "Improvements in machines for crushing and pounding stones, ore, and other materials."

2989. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "Improvements in mowing and reaping machinery."—A communication to him from abroad by William Van Anden, of New York, in the United States of America.

2991. And William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in the construction of parts of electric telegraph bell apparatus, and in apparatus used in making the same."—A communication to him from abroad by Mr. Pierre Désiré Prud'homme, of 29, Boulevart St. Martin, Paris, in the empire of France, Mechanician.

2994. And Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in the manufacture of soap, and the preparation of materials for the purpose."—A communication to him from abroad by Louis Marie Théophile Riot, of 33, Boulevart Saint Martin, Paris, France.

2995. And William Rowan, of the firm of John Rowan and Sons, of Belfast, in the county of Antrim, Engineers, has given the like notice in respect of the invention of "Improvements in machines for heckling and scutching flax and other vegetable fibres."

As set forth in their respective petitions, all recorded in the said office on the 27th day of November, 1861.

3006. And Benjamin Pitt, of 3A, Great Carter Lane, in the city of London, Engineer, and James John Shedlock, of 1, Wendale Villas, Earl's Court, Kensington, W., have given the like notice in respect of the invention of "Improvements in cocks or valves for the passage of fluids."

As set forth in their petition, recorded in the said office on the 28th day of November, 1861.

3011. And Samuel Tonks, of West Bromwich, in the county of Stafford, Builder, and Job Brookes, of West Bromwich aforesaid, Smith, have given the like notice in respect of the invention of "Improvements in steam boiler furnaces, and in setting certain kinds of steam boilers."

As set forth in their petition, recorded in the said office on the 29th day of November, 1861.

3018. And John William Gibson, of the firm of Messrs. Turner and Gibson, of the Hammersmith Iron Works, Dublin, has given the like notice in respect of the invention of "Improvements in ordnance, applicable also to small arms"

As set forth in his petition, recorded in the said office on the 30th day of November, 1861.

3040. And Henry George Hacker, of Woodford Bridge, in the county of Essex, has given the like notice in respect of the invention of "Improvements in machinery for the manufacture of chenille and other circular pile fabrics."

3042. And Robert Kennedy and James Armstrong, both of Lisburn, in the kingdom of Ireland, have given the like notice in respect of the invention of "An improved arrangement of driving gear."

As set forth in their respective petitions, both recorded in the said office on the 4th day of December, 1861.

3055. And Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in printing and ornamenting textile fabrics, paper hangings, and other materials, and

in surfaces and apparatus for such purposes."—A communication to him from abroad by Alexandre Adrien Despréame, of 33, Boulevart Saint Martin, Paris, France.

As set forth in his petition, recorded in the said office on the 5th day of December, 1861.

3087. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in gloves."—A communication to him from abroad by Mr. Alfred Alexander Abdon Cressent, of 29, Boulevart St. Martin, Paris, Merchant.

As set forth in his petition, recorded in the said office on the 9th day of December, 1861.

3093. And JOSEPH ANTOINE JEAN REDIER, of 2, Rue Sainte Appoline, Paris, France, and of 4, South Street, Finsbury, London, has given the like notice in respect of the invention of "Some improvements in pocket watches."

3094. And VICTOR LÉON DAGUZAN, of 2, Rue Sainte Appoline, Paris, France, and 4, South Street, Finsbury, London, Painter, has given the like notice in respect of the invention of "Improvements in the method of paving roads and other places."

As set forth in their respective petitions, both recorded in the said office on the 10th day of December, 1861.

3120. And JOSEPH DOMINIQUE JOBIN, of South Island Place, Clapham Road, in the county of Surrey, Engineer, has given the like notice in respect of the invention of "Improvements in locomotive engines, parts of which improvements are also applicable to marine and stationary engines."

As set forth in his petition, recorded in the said office on the 12th day of December, 1861.

3196. And WILLIAM CLARK, of 53, Chancery Lane in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for the manufacture of matches."—A communication to him from abroad by Messieurs Francis Lavallée and Francis Lavallée, junior, Merchants, of 29, Boulevart St. Martin, Paris, in the empire of France.

As set forth in his petition, recorded in the said office on the 20th day of December, 1861.

3227. And GEORGE HENRY BIRKBECK, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, has given the like notice in respect of the invention of "Improvements in the arrangement of traction and connecting apparatus for railway carriages and trains."—A communication to him from abroad by M. Claude Arnoux, Engineer, of Paris, in the empire of France.

As set forth in his petition, recorded in the said office on the 24th day of December, 1861.

3239. And THOMAS SILVER, of Philadelphia, U.S., Gentleman, has given the like notice in respect of the invention of "Improvements in apparatus for governing or regulating the speed of steam and other engines."

As set forth in his petition, recorded in the said office on the 27th day of December, 1861.

3271. And WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex,. Civil Engineer, has given the like notice in respect of the invention of "Improved apparatus for boring rocks and other mineral substances."—A communication to him from abroad by Emanuel Lisbet, of No. 45, Rue St. Sébastien, Paris, in the empire of France.

As set forth in his petition, recorded in the said office on the 31st day of December, 1861.

35. And HENRY DAVIS POCHIN, of Salford, in the county of Lancaster, Manufacturing Chemist, has given the like notice in respect of the invention of "Improvements in the manufacture of rosin, soap, or size."

As set forth in his petition, recorded in the said office on the 4th day of January, 1862.

189. And CHARLES GODFREY HALL, of Regent Street, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in the manufacture of boots, shoes, and leggings."

As set forth in his petition, recorded in the said office on the 24th day of January, 1862.

425. And JAMES COMBE, of Belfast, has given the like notice in respect of the invention of "Improvements in machinery for winding cops, and in the treatment of cops for warps and other purposes."

As set forth in his petition, recorded in the said office on the 17th day of February, 1862.

537. And JAMES TANGYE, of the firm of Tangye Brothers, and Price, of Birmingham, in the county of Warwick, Manufacturers, has given the like notice in respect of the invention of "An improvement or improvements in hydraulic lifting jacks."

As set forth in his petition, recorded in the said office on the 27th day of February, 1862.

544. And PIERRE DESTAING AZEMAR, of Paris, France, Watch Maker, has given the like notice in respect of the invention of "An improved mechanical arrangement for the winding up and the setting of the hands of watches by means of the knob of the pendant."

As set forth in his petition, recorded in the said office on the 28th day of February, 1862.

555. And JAMES SIM, of the city of Aberdeen, North Britain, Manufacturing Chemist, has given the like notice in respect of the invention of "Improvements in the construction of gas meters."

As set forth in his petition, recorded in the said office on the 1st day of March, 1862.

603. And WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "An improved process and apparatus for reducing wood, straw, and other vegetable substances to

pulp, for the manufacture of paper."—A communication to him from abroad by John Reynolds Knox, of the city and state of New York, United States of America.

As set forth in his petition, recorded in the said office on the 5th day of March, 1862.

610. And Joseph Revell, of Dukinfield, in the county of Chester, Master Plasterer and Decorator, has given the like notice in respect of the invention of "Improvements in securing the rails of railways and tram-ways to the chairs."

617. And Thomas Henton Wood, of Blackweir, in the county of Glamorgan, Gentleman, has given the like notice in respect of the invention of "Improvements in apparatus employed in the manufacture of artificial fuel."

As set forth in their respective petitions, both recorded in the said office on the 7th day of March, 1862.

627. And William Noy Wilkins, of Saint John's Wood, in the county of Middlesex, Artist, has given the like notice in respect of the invention of "Improvements in the manufacture of pigments for oil and water colors."

As set forth in his petition, recorded in the said office on the 8th day of March, 1862.

650. And Henry Herman Kromschroeder, of 32, Princess Terrace, Regent's Park, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in gas meters."

As set forth in his petition, recorded in the said office on the 10th day of March, 1862.

752. And William Tongue, of Bradford, in the county of York, Engineer, has given the like notice in respect of the invention of "Improvements in machinery and in processes for preparing, heckling, dressing, and combing flax, hemp, silk, and other fibrous materials."

As set forth in his petition, recorded in the said office on the 18th day of March, 1861.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

1st April, 1862.

2447. John William Scott, of the city of Worcester, Button Manufacturer, for an invention of "Improvements in tools for the manufacture of leather and other rings, washers, and laces."—Dated 1st October, 1861.

2480. George Knox, of Skinners Place, in the city of London, Paper Manufacturer, for an invention of "An improvement in paper making machines."—Dated 4th October, 1861.

2488. John Edwards, of 77, Aldermanbury, in the city of London, for an invention of "Improvements in the manufacture of buttons."—Dated 5th October, 1861.

2490. William Rowan, of the firm of John Rowan and Sons, of Belfast, in the county of Antrim, Engineers, for an invention of "Improvements in cylinders or drums and beaters for machines for scutching and preparing flax and other fibres."—Dated 5th October, 1861.

2492. John Scott Collins, of Liverpool, in the county of Lancaster, of the firm of Coulrough, Boyd, and Company, Ship Chandlers and Sail Makers, for an invention of "An improved apparatus for reefing and furling the sails of ships and other vessels."—Dated 5th October, 1861.

2496. Thomas Hughes, of Birmingham, in the county of Warwick, Manager of the Imperial Iron Tube Company, for an invention of "An improved high pressure tap for regulating and controlling the flow of steam, water, or other fluids."—Dated 5th October, 1861.

2502. George Kelson Stothert, of Bristol, for an invention of "Improvements in condensing apparatus."—Dated 7th October, 1861.

2506. Alfred Ford, of the Priory, Battersea, in the county of Surrey, Surgeon, for "An improved method of forming waterproof fabrics by combining paper with woven or spun fabrics."—Dated 8th October, 1861.

2522. Frederick Curtis, of Newton, in the county of Middlesex, and State of Massachusetts, of the United States of America, for an invention of "A new and useful improvement in firearms."—Dated 9th October, 1861.

2523. William Palmer, of Sutton Street, Clerkenwell, in the county of Middlesex, for an invention of "Improvements in lamps and lamp wicks."—Dated 9th October, 1861.

2525. Thomas Tidmarsh, of Dorking, county of Surrey, Agriculturist, for an invention of "An improved artificial manure."—Dated 9th October, 1861.

2530. William Mould and John Hall, of Belmont, near Bolton, and Samuel Cook and William Henry Hacking, of Bury, all in the county of Lancaster, for an invention of "Improvements in machinery for manufacturing healds or harness used in looms for weaving."—Dated 10th October, 1861.

2552. Henry Nelson, of the city of Manchester, in the county of Lancaster, Machine Maker, for an invention of "Improvements in machinery or apparatus for punching washers for throstles and other similar purposes."—Dated 12th October, 1861.

2604. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in braiding machines."—A communication to him from abroad by Thomas James Sloan, of Paris, in the empire of France, Engineer.—Dated 18th October, 1861.

2614. James Bourne, of Oakamoor, in the county of Stafford, Engineer, and Edward Kidd, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improved machinery for the manufacture of metal tubes and cylinders, which is also applicable to other useful purposes." —Dated 19th October, 1861.

2616. Charles De Bergue, of Dowgate Hill, in the city of London, Engineer, for an invention of "Improvements in sleeper chairs for the permanent way of railways."—Dated 19th October, 1861.

2636. George England, of Hatcham Iron Works, New Cross, in the county of Surrey, Engineer, for an invention of "Improvements in planing machines."—Dated 22nd October, 1861.

2643. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in processes or means employed for separating or extracting silver from lead."—A communication to him from abroad by Jules Frederic De la Batie, Advocate of Paris, in the empire of France.—Dated 23rd October, 1861.

2720. Evan Leigh, of the city of Manchester, in the county of Lancaster, Mechanical Engineer, for an invention of "Improvements in the construction of sailing ships and other vessels."—Dated 30th October, 1861.

2732. John Americus Fanshawe, of Tottenham, in the county of Middlesex, Engineer, and James Archibald Jaques, of the same place, Chemist, for an invention of "Improvements in the construction of steam generators."—Dated 31st October, 1861.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 29th March*, 1862, *inclusive.*)

27th March.

778. Thomas Carr, of Bebington, in the county of Chester, Artificial Manure Manufacturer, for an invention of "Improvements in machinery for disintegrating artificial manures and various other substances."—Dated 29th March, 1859.

787. Thomas Taylor, of Vere Street, in the county of Middlesex, Chemist, for an invention of "Improved means of giving increased strength to paper."—Dated 29th March, 1859.

798. Cowper Phipps Coles, of Southsea, in the county of Hants, Captain R.N., for an invention of "An apparatus for defending guns and gunners in ships of war, gun boats, and land batteries."—Dated 30th March, 1859.

806. Thomas Ivory, of Edinburgh, Advocate, for an invention of "Improvements in steam-boilers and furnaces for the same."—Dated 31st March, 1859.

809. Samuel Stephen Bateson, of 17, Bolton Street, Mayfair, in the county of Middlesex, Barrister at Law, for an invention of "Improvements in generating steam, and in the apparatus employed therein."—Dated 31st March, 1859.

836. Joseph Eccles, of Blackburn, in the county of Lancaster, Cotton Manufacturer, for an invention of "Improvements in machinery for making bricks, tiles, and other articles formed of plastic materials."—Dated 4th April, 1859.

28th March.

780. William Mossman, of No. 50, Cumming Street, Pentonville, in the parish of Clerkenwell, in the county of Middlesex, Manufacturing Stationer, for an invention of "Improvements in machinery applied to embossing or cutting presses for the better and more expeditious manner of manufacturing ornamental cut out and embossed work in paper, leather, parchment, cloth, foil and other material."— Dated 29th March, 1859.

29th March.

800. Alfred Vincent Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "An improved governor for marine and other steam engines."—A communication from abroad by H. C. Sergeant, of the United States of America.—Dated 30th March, 1859.

851. Leonard Brierley, of Birmingham, in the county of Warwick, Manufacturer, and Henry Geering, of Birmingham aforesaid, Manufacturer, for an invention of "A new or improved method of ornamenting metallic bedsteads and other articles of metallic furniture."—Dated 5th April, 1859.

Errata in Journal of 28th March, 1862.

471. For "Inventor" read "Merchant."

637. For "Improvements" read "Certain improvements."

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

FOREIGN PATENTS.



SWEDEN.*

List of Patents for Inventions delivered during the Year 1861.

(*Communicated by the Swedish Government.*)

(For preceding List, see No. 757 of this Journal.†)

1. Albert François Romain Delannoy, for "An apparatus and process for lubricating all kinds of axles."—8 years.—Dated 8th January, 1861.
2. Henry Jacques Giffard, of Paris, for "Improvements in apparatus for feeding steam and other boilers, and applying the same to raising or forcing liquids in general."—8 years.—Dated 9th January, 1861.
3. N. F. Liedbeck, for "An instrument for calculating surfaces."—8 years.—Dated 14th January, 1861.
4. P. G. Lagerstedt, for "A mode of utilizing the gases of forges for heating smelting furnaces."—8 years.—Dated 14th January, 1861.
5. Leon Pierre Barré, of Paris, for "Improvements in the pipes of tubular steam engines."—8 years.—Dated 21st January, 1861.
6. Wilh. Risch, of Berlin, for "A machine for dressing plain cotton and linen fabrics."—7 years.—Dated 23rd January, 1861.
7. E. A. Naesman, for "A punching machine for the manufacture of locks."—8 years.—Dated 26th January, 1861.
8. G. M. Stjernsvard, for "A kind of preserving vessels for conveyance."—8 years.—Dated 31st January, 1861.
9. C. R. Wiger, for "Construction of rotary steam engines."—10 years.—Dated 2nd February, 1861.
10. Johan Way, for "A peculiar construction of breech loading fire-arms."—8 years.—Dated 4th February, 1861.
11. A. Olzon and E. Jonson, for "A machine for cutting shingles for roofs."—8 years.—Dated 6th February, 1861.
12. Baldwin Neesen, of Cleves, for "A grease box for railway carriages."—8 years.—Dated 14th February, 1861.
13. C. Cavallin, for "Improvements in Ericsson's Caloric Engines, as patented 19th February, 1859."—10 years.—Dated 23rd February, 1861.
14. C. G. A. Bergh, for "Manufacture of brass snuff boxes."—3 years.—Dated 6th March, 1861.
15. A. Rosquist, for "Construction of iron kitchen ranges."—6 years.—Dated 6th March, 1861.
16. Julius De Bary, of Offenbach, for "A machine for the manufacture of cigars."—10 years.—Dated 6th March, 1861.
17. J. W. Knorring, for "Construction of rotary steam engines."—10 years.—Dated 13th March, 1861.
18. Swiatoslar Zoubtchaninoff, of Paris, for "A kind of cement for coating vessels, buildings, roofs, &c."—6 years.—Dated 16th March, 1861.
19. Heinrich Nicolai, for "Air and water-tight windows."—7 years.—Dated 16th March, 1861.
20. C. A. Lindvall, for "An apparatus for superheating steam."—8 years.—Dated 20th March, 1861.
21. Edward Brown Wilson, for "Improvements in the manufacture of wheels of railway carriages or other articles from cast steel or malleable cast iron."—10 years.—Dated 25th March, 1861.
22. Louis Bauhoefer, of Philadelphia, for "A life apparatus from water-calthrop."—8 years.——Dated 25th March, 1861.
23. Julius Imme, of Berlin, for "A so-called 'Hygienic rubber.'"—7 years.—Dated 6th March, 1861.
24. Ernst Friedr. Anthon, of Prague, for "Improvements in extracting sugar from potatoes."—7 years.—Dated 13th April, 1861.
25. Carl A. Jensen and Richard Frisk, for "A motor for saw mills."—8 years.—Dated 23rd April, 1861.
26. J. J. Sundstrom, for "A centrifugal machine."—8 years.—Dated 24th April, 1861.
27. Chr. Nygren, for "A mode of coating trees with glass."—6 years.—Dated 10th May, 1861.
28. C. Ostlund, for "A machine for the manufacture of nails, pins, and bolts."—10 years.—Dated 10th May, 1861.
29. C. Klemming, for "Peculiar basins of night-stools."—6 years.—Dated 18th May, 1861.
30. J. P. Lundgren, for "Manufacture of polishing powder."—5 years.—Dated 18th May, 1861.
31. Axel Leonard and Carl Victor Krouthen, for "Rotary steam-engines."—10 years.—Dated 24th May, 1861.
32. Friedrich Wilhelm Dachne, for "Improvements in extracting copper from its ores."—10 years.—Dated 28th May, 1861.
33. W. H. Stoopendaal, for "Manufacture of blinds."—7 years.—Dated 29th May, 1861.
34. Arthur Warner, of London, for "Improvements in the manufacture of iron, steel, copper, lead, tin, zinc, and their alloys, also in the manufacture of coke."—10 years.—Dated 29th May, 1861.
35. A. J. Myhroold, for "Improvements in the breech-loading system of guns."—7 years.—Dated 31st May, 1861.
36. Filip Bergendal, for "A kitchen-range."—10 years.—Dated 31st May, 1861.

* For the Swedish Patent Law, see No. 354 of this Journal.

† The unpublished Lists, from 1830 to 1856, may be consulted in the Library of the Great Seal Patent Office in the original and in an English translation.

37. Lars P. Bockert, for "A mode of obtaining malt liquors."—8 years.—Dated 7th June, 1861.

38. H. Wesche, for "A process and apparatus for galvanizing iron and other metals."—7 years.—Dated 7th June, 1861.

39. J. M. Majeran, for "A mode of obtaining so-called 'Wood-wool' and its sub-products from pine or fir leaves."—6 years.—Dated 10th June, 1861.

40. Georg Svederus, for "A process for extracting copper from its ores."—7 years.—Dated 29th June, 1861.

41. B. Zandal, for "A peculiar construction of fire-arms."—10 years.—Dated 1st July, 1861.

42. Henry O. Jones and Charles G. Lundborg, of the U. S. of America, for "Extracting photogen and other oils, also paraffine, from coal and other substances containing asphalt, by means of iron retorts."—10 years.—Dated 1st July, 1861.

43. Pierre Thiry, of Paris, for "So-called 'Moveable horse-shoes.'"—5 years.—Dated 5th July, 1861.

44. E. Semper, of Görlitz, for "Various machines for drying wool and cotton, &c., for drying and tentering cloth and other woollen fabrics, and also for drying and cleaning teazles."—10 years.—Dated 6th July, 1861.

45. Antoine Constant Vautier, of France, for "A process for obtaining silk, cotton, and linen substances for spinning, weaving, and paper-manufacture from all kinds of herbs, trees, and shrubs."—10 years.—Dated 18th July, 1861.

46. Wilhelm A. Wenneberg and A. Rosqvist, for "A self-acting mechanism for turning the surfaces of wheels of railway carriages, and of other curvilinear surfaces."—10 years.—Dated 19th July, 1861.

47. Victor Lenning, of Norrköping, for "Construction of hydraulic wheels."—8 years.—Dated 7th August, 1861.

48. C. G. Hierta, for "A peculiar construction of brick kilns."—5 years.—Dated 14th August, 1861.

49. J. Ericsson, for "A machine for drying corn."—8 years.—Dated 14th August, 1861.

50. P. J. Brandelius, for "Improvements in the manufacture of upper leather."—6 years.—Dated 14th August, 1861.

51. C. Ruppert, for "A peculiar construction of poles or props for lattice-bridges, applicable also to the construction of vessels."—10 years.—Dated 14th August, 1861.

52. A. Rosqvist and Wilhelm A. Wennberg, for "Improvements in smoothing irons."—5 years.—Dated 2nd September, 1861.

53. Edmund Smith, of Hamburg, for "A gas meter."—8 years.—Dated 9th September, 1861.

54. Robert Mushet, for "Obtaining alloys of titanium and iron."—10 years.—Dated 9th September, 1861.

55. Hans Siemens, of Dresden, for "A regenerating gas furnace."—10 years.—Dated 9th September, 1861.

56. Carl Magnus Sandberg, for "Improvements in distilling apparatus."—8 years.—Dated 9th September, 1861.

57. F. W. Kantzow, for "Manufacture of iron plates and other iron articles."—7 years.—Dated 9th September, 1861.

58. Anker Heegard, of Kopenhamm, for "A mode of raising water."—5 years.—Dated 25th September, 1861.

59. Georg Swederus, for "A process for extracting copper from its ores."—10 years.—Dated 26th September, 1861.

60. M. Junggvist, for "A process and apparatus for dyeing cotton and linen yarns, and also cotton, by means of cold vats."—2 years.—Dated 26th September, 1861.

61. Johan August Ljungberg, for "Improvements in the construction of distilling apparatus." 8 years.—Dated 26th September, 1861.

62. G. F. Goransson, of Gefle, for "Manufacture of wheel-tyres for locomotives, railway and other carriages."—10 years.—Dated 10th September, 1861.

63. Johs. Holmgren, for "An apparatus for drying corn."—10 years.—Dated 28th September, 1861.

64. Joseph Marino, for "Improvements in arrangements for promoting cleanliness."—8 years.—Dated 28th September, 1861.

65. P. U. Gussander, for "Improvements in his milk-vessels, as patented 10th September, 1853."—6 years.—Dated 28th September, 1861.

66. Carl J. Berg and C. G. Tingberg, for "Heating apparatus."—8 years.—Dated 28th September, 1861.

67. Paul Haglund, for "Manufacture of millstones of iron plates, with the iron or wooden supports belonging thereto."—8 years.—Dated 28th September, 1861.

68. P. C. Kjellberg, for "A kind of carriages with moveable iron rails."—8 years.—Dated 28th September, 1861.

69. Johs. Holmgren, for "Grease for lubricating."—8 years.—Dated 17th October, 1861.

70. N. Fr. Sandberg and F. W. Bergström, for "Manufacture of lighting gas from aluminous schist or schistous lignite for applying the same, and for the apparatus employed thereat."—10 years.—Dated 21st October, 1861.

71. English and Hanssen, of Kopenhamm, for "Pumps."—8 years.—Dated 4th November, 1861.

72. Albert Putsch, of Berlin, for "Gas-kilns for baking porcelain and stoneware."—10 years.—Dated 4th November, 1861.

73. C. Wittenstrom and A. F. Rosborg, for "Generators heated by means of coal and peat."—10 years.—Dated 13th November, 1861.

74. Joseph Wilson, of Manningham, England, for "An apparatus for sawing timber and other wood."—10 years.—Dated 13th November, 1861.

75. Fredrik O. Malmsjö, for "Sweeping machines."—5 years.—Dated 13th November, 1861.

76. Gustaf Hogner and O. P. Hamberg, for "A peculiar bridle."—5 years.—Dated 13th November, 1861.

77. Henry Bessemer, of London, for "Improvements in machines or apparatus used in the manufacture of malleable iron and steel."—10 years.—Dated 19th November, 1861.

78. Henry Bessemer, of London, for "Improvements in the manufacture of malleable iron and steel, and in the machines and apparatus employed thereat."—10 years.—Dated 19th November, 1861.

79. Eugen Langen, of Cologne, for "Improvements in smoke-consuming fire-places."—10 years. Dated 23rd November, 1861.

80. Gustaf Santesson, for "A mode of melting glass without crucibles by means of gas."—10 years.—Dated 3rd December, 1861.

81. Francis Wrigley, of Manchester, for "Improvements in the construction, manufacture, and fixing of armour plates for the protection of ships and fortifications against projectiles."—10 years. Dated 3rd December, 1861.

82. Chr. Ulr. Dahlberg, for "Manufacture of colouring substances from coal and peat."—4 years.—Dated 5th December, 1861.

83. J. A. Moren, for "Sails of windmills with regulators."—8 years.—Dated 5th December 1861.

84. L. F. Stahlberg, for "Machines for the manufacture of knife-blades."—10 years.—Dated 13th December, 1861.

85. P. C. Kjellberg, for "Construction of railways, and carriages belonging thereto."—8 years.—Dated 11th December, 1861.

86. S. Lindskog and P. B. Fryckholm, for "Water-closets."—5 years.—Dated 11th December 1861.

87. J. Ulrich Ott, of Zurich, for "An expeditious ruling machine."—7 years.—Dated 16th December, 1861.

88. J. Ulrich Ott, of Zurich, for "Pens for ruling paper."—5 years.—Dated 16th December, 1861.

89. James Cooke, of Manchester for "Improvements in singeing, finishing, or dressing fabrics, yarn, felt, and other similar substances, and in the machines and apparatus used thereat."—10 years.—Dated 18th December, 1861.

90. Th. Arnberg and Th. Rennerfelt, for "Improvements in gas burners."—7 years.—Dated 18th December, 1861.

91. C. L. T. Engdahl, for "Improvements in the mode of instructing in writing."—7 years.—Dated 18th December, 1861.

92. C. Gustafsson, for "A machine and process for the manufacture of rolled nails."—12 years.—Dated 20th December, 1861.

93. Johan Thorell, for "Improvements in kitchen ranges and chimneys with their pipes."—7 years.—Dated 20th December, 1861.

94. Carl Magnus Sandberg, for "Improvements in the construction of distilling apparatus."—8 years.—Dated 23rd December, 1861.

95. Alexandre Friedmann and Emile Erlanger, for "Heating apparatus applicable to steam boilers, metallurgical and other furnaces." 10 years.—Dated 24th December, 1861.

96. Carl Friedrich Schellenberg, of Chemnitz, for "A winding apparatus or reel."—8 years.—Dated 24th December, 1861.

97. Carl Friedrich Schellenberg, of Chemnitz, for "A combing and carding machine."—8 years.—Dated 24th December, 1861.

98. P. J. Winstrup, for "Improvements in the construction of rifled guns."—10 years.—Dated 24th December, 1861.

99. Georg B. Arnold, of New York, for "A so-called 'Ruffle mechanism.'"—8 years.—Dated 28th December, 1861.

SUPPLEMENT to the SERIES of LETTERS PATENT and SPECIFICATIONS of LETTERS PATENT for INVENTIONS recorded in the Great Seal Patent Office, and granted between the 1st March (14 Jac. I.) A.D. 1617, and the 1st October (16 Vict.) A.D. 1852; consisting for the most part of Reprints of scarce Pamphlets, descriptive of the early patented Inventions comprised in that Series. Edited by Bennet Woodcroft, F.R.S., Superintendent of Specifications, etc. In one vol., price 9*s.* 6*d.*, or each Tract separately at the price affixed.

CONTENTS OF VOL. I.

1. Metallica; or, the Treatise of Metallica, briefly comprehending the doctrine of diverse new metallical inventions, &c. By Simon Sturtevant. (*Letters Patent, dated 29th February*, 1611.) Price 1*s.* 4*d.*

2. A Treatise of Metallica, but not that which was published by Mr. Simon Sturtevant, upon his Patent, &c. By John Rovinson. (*Letters Patent, granted A.D.* 1612.) Price 4*d*

3. A Commission directed to Sir Richard Wynne and others to inquire upon oath whether Nicholas Page or Sir Nicholas Halse was the first inventor of certaine kilnes for the drying of malt, &c. &c. (*Letters Patent, Nos.* 33 *and* 85, *respectively dated* 8*th April*, 1626, *and* 23*rd July*, 1635.) Price 2*d.*

4. Dud Dudley's Metallum Martis; or iron made with pit-coale, sea-coale, &c. (*Letters Patent, Nos.* 18 *and* 117, *respectively dated* 22*nd February*, 1620 *and* 2*nd May*, 1638.) Price 8*d.*

5 Description of the nature and working of the patent Water-scoop Wheels invented by William Wheler, as compared with the raising wheels now in common use. By J. W. B. Translated from the Dutch by Dr. Tollhausen. (*Letters Patent, No.* 127, *dated* 24*th June*, 1642.) Price 2*s.*

6. An exact and true definition of the stupendous Water-commanding Engine, invented by the Right Honourable (and deservedly to be praised and admired) Edward Somerset, Lord Marquis of Worcester, &c. &c. (*Stat.* 15 *Car. II. c.* 12. *A.D.* 1663.) Price 4*d.*

7. Navigation Improved; or the art of rowing ships of all rates in calms, with a more easy, swift, and steady motion than oars can. By Thomas Savery. (*Letters Patent, No.* 347, *dated* 10*th January*, 1696.) Price 1*s.*

8. The Miner's Friend; or an engine to raise water by fire described, &c. By Thomas Savery. (*Letters Patent, No.* 356, *dated* 25*th July*, 1698, *and Stat.* 10 *&* 11 *Will. III. c.* 31. *A.D.* 1699.) Price 1*s.*

9. Specimina Ichnographica; or a brief narrative of several new inventions and experiments, particularly the navigating a ship in a calm, &c. By John Allen, M.D. (*Letters Patent, No.* 513, *dated* 7*th August*, 1729.) Price 8*d.*

10. A description and draught of a new-invented Machine for carrying vessels or ships out of or into any harbour, port or river, against wind and tide, or in a calm, &c. By Jonathan Hulls. (*Letters Patent, No.* 556, *dated* 21*st December*, 1736.) Price 8*d.*

11. An historical account of a new method for extracting the foul air out of ships, &c., with the description and draught of the machines by which it is performed, &c. By Samuel Sutton, the Inventor. To which are annexed two relations given thereof to the Royal Society by Dr. Mead and Mr. Watson. (*Letters Patent, No.* 602, *dated* 16*th March*, 1744.) Price 1*s.*

COLONIAL PATENT LAW.

TASMANIA.

ANNO VICESIMO SECUNDO
VICTORIÆ REGINÆ.

NO. XXII.

AN ACT TO REGULATE THE GRANTING OF LETTERS PATENT FOR INVENTIONS.

[5 November, 1858.]

Whereas it is expedient to promote and encourage the discovery and use of new manufactures, and to afford greater facilities for obtaining for a limited period the exclusive enjoyment thereof by means of Letters Patent: Be it therefore enacted by His Excellency the Governor of Tasmania, by and with the advice and consent of the Legislative Council and House of Assembly, in Parliament assembled, as follows:—

1. In the construction of this Act the following expressions shall have the meanings hereby assigned to them, unless such meanings are repugnant to or inconsistent with the context:

"Law Officer" shall mean Her Majesty's Attorney-General or Solicitor-General for the time being of the Colony of Tasmania:

"Invention" shall mean any manner of new manufacture the subject of Letters Patent and Grant of Privilege within the meaning of this Act:

"Petition," "Declaration," "Specification," "Appointment to hear Application," "Warrant," and "Letters Patent," respectively, shall mean instruments in the form and to the effect in the Schedule, subject to such alterations as may, from time to time, be made therein under the powers and provisions of this Act.

2. It shall be lawful for the Governor, with the advice of the Executive Council, in the name and on behalf of Her Majesty the Queen, to make and issue, in the manner herein-after mentioned, Letters Patent and Grants of Privilege for any term not exceeding fourteen years from the date thereof of the sole working or making of any manner of new manufactures within this Colony to the true and first Inventor of such manufactures, which others at the time of making such Letters Patent and Grants do not use, so as also they be not contrary to law nor mischievous to the community by raising prices of commodities, or hurt of trade, or generally inconvenient.

3. It shall be lawful for the Governor with the advice of the Executive Council, from time to time, to make such rules and regulations, not inconsistent with the provisions of this Act, as may appear to be necessary and expedient for the purposes of this Act; and all such rules and regulations shall be laid before both Houses of the Parliament of Tasmania within fourteen days after the making thereof if Parliament is then sitting, and if Parliament is not then sitting, then within fourteen days after the next meeting of Parliament.

4. Every application for the grant in this Colony, under this Act, of Letters Patent for inventions shall be made by petition to the Governor, the allegations of which petition shall be supported by a declaration, to be made and subscribed by the applicant, that he is the true and first Inventor, and that the article has not to his knowledge or belief been before made or used in this Colony; and such petitions and declarations shall be lodged at the office of the Colonial Secretary, and shall be in the form in the Schedule or to the like effect.

5. The applicant for Letters Patent for an invention shall, at the time of lodging such Petition and Declaration as aforesaid, deposit at the said office of the Colonial Secretary an instrument in writing under his hand and seal, herein-after called a Specification, particularly describing and ascertaining the nature of the said invention, and in what manner the same is to be performed, which Specification shall be mentioned in and annexed to the Declaration; and shall also then deposit at the said office a copy of such instrument, and of the drawings accompanying the same, if any; and the day of the deposit of every such Specification shall be recorded at the said office and endorsed on such Specification, and a certificate thereof given to such applicant or his agent; and thereupon, subject and without prejudice to the provisions herein-after contained, the said invention shall be protected under this Act for the term of six months from the day of such deposit, and the applicant shall have during such term the like powers, rights, and privileges as might have been conferred upon him by Letters Patent for such invention issued under this Act, and duly sealed as of the day of such deposit; and during the continuance of such powers, rights, and privileges under this provision, such invention may be used and published without prejudice to any Letters Patent to be granted for the same; and where Letters Patent are granted in respect of such invention, such Letters Patent shall be conditioned to become void if such Specification does not particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed: Provided always, that in case the title of the invention or the said Specification is too large or insufficient, it shall be lawful for the law officer during the said term of six months, and before the grant of the Letters Patent, to allow or require the same to be amended, or another and sufficient Specification to be deposited in lieu of such Specification as aforesaid; and every such amended or new Specification shall have the same force, effect, and operation as if it had been originally deposited in its amended or new state.

6. Every such Specification shall be in the form in the Schedule, or to the like effect, and shall be written upon parchment upon both sides, and every page thereof shall be of the exact size of twenty inches in length by fifteen inches in breadth, leaving a margin of at least one inch and a half on each side of every such page in order and to the intent that the same may be bound into books for safe custody, but the drawings accompanying such Specification, if any, may be made upon larger sheets of parchment, leaving a margin of the size and for the purpose aforesaid; and every copy of any such Specification as aforesaid, and of the drawings accompanying the same, if any, shall in like manner be written upon paper of the size and with the margins aforesaid.

7. In case of any application for Letters Patent for an invention, and the obtaining of protection for the same by reason of the deposit of any such Specification as aforesaid in fraud of the true and first inventor, any Letters Patent granted to the true and first inventor of such invention shall not be invalidated by reason of such application or of such protection as aforesaid, or of any use or publication of the invention subsequent to such application and before the expiration of the said term of protection.

8. The applicant, so soon as he thinks fit after the deposit of such Specification as aforesaid, and of the drawings and models accompanying the same, if any, may give notice in writing at the office of the law officer of his intention to procced with his application for Letters Patent for the said invention, stating in such notice the title of the said invention, and the day on which the Specification thereof was deposited at the office of the Colonial Secretary, and shall at the time of giving such notice produce the said certificate of deposit; and thereupon the law officer shall deliver to the applicant or his agent an appointment to hear the application in the form in the Schedule, or to the like effect; and such applicant or agent shall cause the said appointment to be published once in the Gazette and twice in some newspaper published in Hobart Town and in Launceston; and any persons having an interest in opposing the grant of Letters Patent for the said invention shall be at liberty to leave particulars in writing of their objections to the said application at the office of the Law Officer within such time, not being less than one month, as the Law Officer by such appointment may direct.

9. At the time and place named in the said appointment the applicant shall produce the Gazette and newspapers containing the same; and the Law Officer shall thereupon hear and consider the said application, and all objections to the same mentioned in the said particulars, if any, and for that purpose shall obtain from the office of the Colonial Secretary the copy of the Specification and of the drawings and models accompanying the same, if any; and the Law Officer may call to his aid such scientific or other person as he may think fit, and may cause such remuneration to be paid to such person as he thinks proper: Provided always, that the applicant, the objectors, and their respective witnesses and evidence, shall be respectively heard, examined, and considered separately and apart from and in the absence of the other and his witnesses and evidence.

10. It shall be lawful for the Law Officer, if he sees fit, by certificate under his hand, to order by and to whom the costs and expenses of any hearing or inquiry upon any objection, or otherwise in relation to the grant of such Letters Patent, shall be paid, and in what manner and by whom such costs are to be ascertained; and if any costs so ordered to be paid are not paid within four days after the amount thereof is so ascertained, it shall be lawful for such Law Officer to make an order for the payment of the same; and every such order may be made a rule of the Supreme Court.

11. It shall be lawful for the Law Officer, after such hearing and consideration as he may think fit, to issue a warrant under his hand and seal for the sealing of Letters Patent for the said invention, and such warrant shall set forth the tenor and effect of the Letters Patent thereby authorized to be granted, and shall direct the insertion in such Letters Patent of all such restrictions, conditions, and provisoes as the Law Officer may deem usual and expedient in such grants, or necessary in pursuance of the provisions of this Act; and the said warrant shall be the warrant for the making and sealing of Letters Patent under this Act according to the tenor of the said warrant; and every such warrant shall be in the form in the Schedule or to the like effect.

12. The write of *scire facias* shall lie for the repeal of any Letters Patent issued under this Act in the like cases as the same would lie in England for the repeal of Letters Patent which may now be issued under the Great Seal; and in case the grantee does not reside in this Colony, it shall be sufficient to file such writ in the proper office of the Supreme Court, and serve notice thereof in writing at the last known residence or place of business of such grantee.

13. Nothing herein contained shall extend to abridge or affect the prerogatives of the Crown in relation to the granting or withholding the grant of any Letters Patent; and it shall be lawful for the Governor in Council to direct such Law Officer to withhold such warrant as aforesaid, or that any Letters Patent for the issuing whereof he may have issued a warrant as aforesaid shall not issue, or to direct the insertion in any such Letters Patent of any restrictions, conditions, or provisoes, in addition to or in substitution of any restrictions, conditions, or provisoes which would otherwise be inserted therein under this Act; and it shall also be lawful for the Governor in Council to direct the Specification in respect of the invention described to be cancelled in any case in which Letters Patent may have been refused to be granted, and thereupon the protection obtained by the deposit of such Specification shall cease.

14. All Letters Patent for inventions granted under this Act shall be in the form in the Schedule or to the like effect, and be made subject to the condition that the same shall be void, and that the powers and privileges thereby granted shall cease and determine, at the expiration of three years and seven years respectively from the date thereof, unless there is paid before the expiration of the said three and seven years respectively the sum or sums of money in that behalf by this Act required to be paid; and the Colonial Treasurer shall issue under his hand a certificate of such payment, and shall endorse a receipt for the same on the Letters Patent.

15. The Colonial Secretary, so soon after the receipt by him of the said warrant as he is required by the applicant, shall cause to be prepared Letters Patent for the invention according to the tenor of the said warrant; and it shall be lawful for the Governor in Council to cause such Letters Patent to be sealed with the seal of the Colony; and such Letters Patent shall be made applicable to this Colony, and shall be valid and effectual within the same.

16. Save as herein-after mentioned, no Letters Patent shall issue on any warrant granted as aforesaid unless application is made to seal such Letters Patent within three months after the date of the said warrant, nor shall any Letters Patent be issued or be of any force or effect unless such Letters Patent are granted during the continuance of the protection

conferred under this Act by reason of such deposit as aforesaid.

17. Where Letters Patent have not been sealed during the continuance of such protection as aforesaid, and the delay in such sealing has arisen from accident and not from the neglect or wilful default of the applicant, it shall be lawful for the Governor, if he thinks fit, to seal such Letters Patent at any time, not being more than one month after the expiration of such protection; and where the applicant for Letters Patent dies during the continuance of such protection as aforesaid, such Letters Patent may be granted to the executors or administrators of such applicant during the continuance of such protection, or at any time within three months after the death of such applicant, notwithstanding the expiration of the term of such protection; and the Letters Patent so granted by virtue of this section shall be of the like force and effect as if they had been granted to such applicant during the continuance of such protection; and in case any Letters Patent are destroyed or lost, other Letters Patent of the like tenor and effect, and sealed and dated as of the same day, may, subject to such regulations as the Governor in Council may direct, be issued under the authority of the warrant in pursuance of which the original Letters Patent were issued.

18. Notwithstanding any law to the contrary, all Letters Patent to be issued in pursuance of this Act shall be sealed and bear date as of the day of the deposit of such Specification as aforesaid; and such Letters Patent shall be of the same force and validity as if they had been sealed on the day as of which the same are expressed to be sealed and bear date; and after any Letters Patent have been issued under this Act it shall not be necessary or material to inquire or ascertain whether such appointment to hear the application as aforesaid has or has not been delivered and published in the manner herein-before mentioned and directed.

19. Where upon any application made under this Act Letters Patent are granted for or in respect of any invention first invented in parts out of this Colony, and a Patent or the like privilege for the monopoly or exclusive use or exercise of such invention in any part out of this Colony is there obtained before the grant of such Letters Patent in this Colony, all rights and privileges under such Letters Patent shall, notwithstanding any term in such Letters Patent limited, cease and be void immediately upon the expiration or other determination of the term during which the Patent or like privilege obtained in such part out of this Colony continues in force, or where more than one such Patent or like privilege is obtained abroad, immediately upon the expiration or determination of the term which first expires or is determined of such several Patents or like privileges: Provided always, that no Letters Patent for or in respect of any invention for which any such Patent or like privilege as aforesaid has been obtained abroad, granted in this Colony after the expiration or determination of the term for which such Patent or privilege was granted or was in force, shall be of any validity.

20. No Letters Patent for any invention granted in pursuance of this Act shall extend to prevent the use of such invention in any foreign ship or vessel, or for the navigation of any foreign ship or vessel, which may be in any port of this Colony, or in any of the waters within the jurisdiction of any of Her Majesty's Courts in this Colony, where such invention is not so used for the manufacture of any goods or commodities to be vended within or exported from this Colony: Provided always, that this enactment shall not extend to the ships or vessels of any foreign state the laws of which authorize subjects of such foreign state having Patents or like privileges for the exclusive use or exercise of inventions within its territories to prevent or interfere with the use of such inventions in British ships or vessels, or in or about the navigation of British ships or vessels while in the ports of such foreign state, or in the waters within the jurisdiction of its Courts, where such inventions are not so used for the manufacture of goods or commodities to be vended within or exported from the territories of such foreign State.

21. Every Specification deposited at the office of the Colonial Secretary as aforesaid, and the drawings and models accompanying the same, if any, and all such Petitions and Declarations as aforesaid, shall forthwith after the grant of the Letters Patent, or if no Letters Patent are granted then immediately on the expiration of six months from the time of such deposit, or upon the Specification being so cancelled as aforesaid, be transferred to, kept, and filed in such office as the Governor in Council from time to time appoints for that purpose; and the copies of such Specifications, and the drawings and models, if any, accompanying the same, shall also be forwarded to and kept at the same office.

22. Any person who obtains Letters Patent under this Act, or in case such person departs with the whole or any part of his interest by assignment, such person together with the assignee if part only has been assigned, or the assignee alone if the whole has been assigned, may apply to the law officer for leave to enter a disclaimer of any part of either the title of the invention or of the Specification, or a memorandum of any alteration in the said title or Specification, not being such a disclaimer or such an alteration as extends the exclusive right granted by the said Letters Patent; and thereupon the law officer shall deliver to such applicant or his agent an appointment to hear such application in the form in the schedule or to the like effect; and such applicant or his agent shall thereupon cause such disclaimer, stating the reason for the same, or such memorandum of alteration, to be written at the foot of the said appointment, and cause the same respectively to be published in the manner herein-before required with respect to the publication of the appointment to hear an application for Letters Patent; and any person having an interest in opposing the said application shall be at liberty to leave particulars in writing of their objections to the same at the office of the law officer, within such time not being less than one month as the law officer by such appointment may direct: Provided always, that where such application as aforesaid is for leave to enter a disclaimer of any part of the title of the said invention, or a memorandum of any alteration in such title, the law officer may dispense with such appointment and publication, and in that case shall certify in the fiat herein-after mentioned that he has dispensed with the same.

23. At the time and place named in such appointment the said applicant shall produce the Gazette

and newspapers containing the same, and the said disclaimer or memorandum of alteration at the foot thereof; and the law officer shall thereupon hear and consider the said application, and all objections to the same mentioned in the said particulars, if any, and all such power and authority shall and may be exercised upon that occasion by the law officer as by virtue of the provisions herein-before contained can and may be exercised in relation to the hearing and considering an application for Letters Patent and objections to the same, and shall and may be enforced in like manner.

24. After such hearing and consideration, or without such hearing and consideration where the said appointment and publication have been dispensed with as aforesaid, such applicant may by leave of the law officer, to be certified by a fiat under his hand to be written at the foot of the same parchment with the disclaimer or memorandum, enter such disclaimer, stating the reason for the same, or such memorandum of alteration; and such disclaimer or memorandum of alteration and fiat shall be filed in the office in which Specifications are appointed to be filed as aforesaid, with the Specification of the invention to which the same relate; and such disclaimer or memorandum of alteration, being so filed in such office, shall be deemed and taken to be part of the Letters Patent or the Specification, and subject to the several incidents thereof, in all courts whatever, and shall be valid and effectual in favour of any person in whom the rights under the said Letters Patent may then be or thereafter become legally vested; and such filing of any disclaimer or memorandum of alteration in pursuance of the leave of the law officer certified as aforesaid shall, except in cases of fraud, be conclusive as to the right of the party to enter such disclaimer or memorandum of alteration under this Act, and no objection shall be allowed to be made in any proceeding upon or touching such Letters Patent, Specification, disclaimer, or memorandum of alteration, on the ground that the person entering such disclaimer or memorandum of alteration had not sufficient authority in that behalf: Provided always, that no action shall be brought upon any Letters Patent in which or on the Specification of which any disclaimer or memorandum of alteration has been filed in respect of any infringement committed prior to the filing of such disclaimer or memorandum of alteration, unless the law officer certifies in his said fiat that any such action may be brought, notwithstanding the entry or filing of such disclaimer or memorandum of alteration; and that no such disclaimer or memorandum of alteration shall be receivable in evidence in any action or suit, save and except in any proceeding by *scire facias* pending at the time when such disclaimer or alteration was filed as aforesaid, but in every such last mentioned action or suit the original title and Specification alone shall be given in evidence, and be deemed and taken to be the title and Specification of the invention for which the Letters Patent have been granted: Provided also, that when any such fiat has been issued under this Act, it shall not be necessary or material to inquire or ascertain whether such appointment as last aforesaid has or has not been delivered and published or dispensed with in accordance with this Act.

25. All Specifications, and the drawings and models accompanying the same, if any, and all petitions, declarations, disclaimers, and memoranda of alterations filed in the office appointed for filing Specifications under and in pursuance of this Act, and also the copies of the Specifications, and drawings and models accompanying the same, if any, kept at the said office, shall be open to the inspection of the public at all reasonable times, subject to such regulations as the Governor in Council may appoint in that behalf.

26. If any person having obtained Letters Patent under this Act, or in case such person has departed with his whole or any part of his interest by assignment, if such person, together with the assignee where part only has been assigned, or if the assignee alone where the whole has been assigned, six months before the expiration or other determination of such Letters Patent, presents to the Governor a petition for the extension of he term in such Letters Patent mentioned, and sets forth in such petition that he has been unable to obtain a due remuneration for his expense and labour in perfecting such invention, and that an exclusive right of using and vending the same for some further period to be named in such petition, in addition to the said term, is necessary for his reimbursement and remuneration, it shall be lawful for the Governor in Council to refer the consideration of the said petition to Commissioners to be appointed for that purpose in the manner herein-after mentioned.

27. If in any suitor action it is proved or specially found by the verdict of a jury that any person who has obtained Letters Patent for any invention or supposed invention was not the first inventor thereof, or of some part thereof, by reason of some other person having invented or used the same or some part thereof in this Colony before the date of such Letters Patent, or if such Patentee or his assigns discover that some other person had, unknown to such Patentee, invented or used the same or some part thereof in this Colony before the date of such Letters Patent, such Patentee or his assigns may petition the Governor to confirm the said Letters Patent, or to grant new Letters Patent, and it shall be lawful for the Governor in Council to refer the consideration of the said petition to Commissioners to be appointed for that purpose in the manner herein-after mentioned.

28. For the purpose of considering any such petition as aforesaid, it shall be lawful for the Governor in Council, if he thinks fit, to issue and direct a commission in the name of Her Majesty to five or more persons, of whom the Judges of the Supreme Court shall be two, reciting such petition and requiring or authorizing such persons or any three of them, of whom one of the said Judges shall be one, to meet at some time, not being less than two months from the publication of the said commission in the Gazette, and at some place to be fixed in the said commission, and then and there to consider the said petition, and to report to the Governor, in case the petitioner prays for an extension of the term in the Letters Patent mentioned, whether any, and if any what, further extension of the said term should be granted, or in case the petitioner prays for a confirmation of the Letters Patent or for a grant of new Letters Patent, whether such confirmation or grant should be made, and upon what, if any, conditions the prayer of any such petition should be complied with.

29. Two months at least before the time named in the Commission for the consideration of any such petition as aforesaid, the petitioner shall cause an

advertisement of the contents of the said commission, in the form in the Schedule or to the like effect, to be published in the same manner as is herein-before required with respect to the publication of the appointment to hear an application for Letters Patent; and any person having an interest in opposing the said petition shall be at liberty to enter a caveat against the same at the office of the Colonial Secretary, at any time not being less than one week before the time named in the commission for the execution thereof.

30. At the time and place fixed in the commission for that purpose the Commissioners shall meet and proceed to consider such petition; and the petitioner shall be heard by his counsel and witnesses to prove his case as stated in such petition, and the publication of the said last-mentioned advertisement as required by this Act; and the persons entering caveats shall likewise be heard by their counsel and witnesses; and all such witnesses shall be examined upon oath, which oath any one of the Commissioners is hereby authorized and required to administer; and the proceedings before the said Commissioners may be adjourned from time to time as may be necessary.

31. If upon hearing and inquiry of the whole matter the Commissioners, in case the petitioner prays for an extension as aforesaid, are of opinion, and so report, that a further extension of the said term should be granted, it shall be lawful for the Governor in Council, if he thinks fit, to grant to the petitioner new Letters Patent for the said invention for any term not exceeding fourteen years after the expiration of the term of the first Letters Patent, anything herein-before contained to the contrary in anywise notwithstanding; and if the Commissioners, in case the petitioner prays for a confirmation or grant as aforesaid, upon examining the said matter, and being satisfied that such Patentee as aforesaid believed himself to be the first and original inventor, and that such invention, or part thereof, had not been publicly and generally used in this Colony before the date of the first Letters Patent, report their opinion that the prayer of such petition ought to be complied with, the Governor in Council may, if he thinks fit, grant such prayer; and the said Letters Patent shall be available at law and in equity to give to such petitioner the sole right of using, making, and vending such invention as against all persons whatsoever, anything herein-before contained to the contrary notwithstanding: Provided, that any person, party to any former suit or action touching any such first Letters Patent as in this section are mentioned, shall be entitled to have notice in writing of the time and place fixed as aforesaid for the first meeting of the said Commissioners to consider the said petition; and that after any such report has been made, it shall not be material or necessary to inquire or ascertain whether any such advertisement as last aforesaid has or has not been published, or whether any such notice as last aforesaid has or has not been given in the manner herein-before directed in that behalf.

32. It shall be lawful for the Governor in Council to insert in any such new Letters Patent as in the preceding Section are mentioned any restrictions, conditions, and provisions which may be recommended by the Commissioners in their report, or which to the Governor in Council may seem proper; and such new Letters Patent shall be sealed and bear date as of the day after the expiration of the term of the first Letters Patent.

33. The Governor may cause indexes to all Specifications, Petitions, Declarations, Disclaimers, and Memoranda of Alterations, deposited and filed as aforesaid, to be prepared in such form as may be thought fit; and such indexes shall be open to the inspection of the public, subject to the regulations to be made by the Governor.

34. There shall be kept at the office appointed for filing Specifications as aforesaid a book, to be called "The Register of Patents," wherein shall be entered and recorded in chronological order all Letters Patent granted under this Act,—the deposit and filing of Specifications, Disclaimers, and Memoranda of Alterations filed in respect of such Letters Patent, — all amendments in such Letters Patent and Specifications,—all confirmations and extensions of such Letters Patent, the expiry, determination, vacating, or cancelling of such Letters Patent, with the dates thereof respectively,—and all such other matters and things affecting the validity of such Letters Patent as the Governor in Council may direct; and such Register, or a copy thereof, shall be open at all convenient times to the inspection of the public, subject to such regulations as the Governor may make in that behalf.

35. There shall be kept at the same office a book, entitled "The Register of Proprietors," wherein shall be entered in such manner as the Governor directs the assignment of any Letters Patent, or of any share or interest therein,—any licence under Letters Patent, and the district to which such licence relates, with the name or names of any person having any share or interest in such Letters Patent or licence,—the date of his or their acquiring such Letters Patent, share, and interest,—and any other matter or thing relating to or affecting the proprietorship in such Letters Patent or licence; and a copy of any entry in such book, certified as herein-after mentioned, shall be given to any person requiring the same, and shall be *primâ facie* proof of the assignment of such Letters Patent, or share or interest therein, or of the licence or proprietorship, as therein expressed; and such register or a copy thereof shall be open to public inspection, subject to such regulations as the Governor may make: Provided always, that until such entry has been made the grantee of the Letters Patent shall be deemed and taken to be the sole and exclusive proprietor of such Letters Patent, and of all the licences and privileges thereby given and granted.

36. It shall be lawful for a larger number than twelve persons to have a legal and beneficial interest in Letters Patent granted under this Act.

37. The Governor may cause a seal to be made for the purposes herein-after mentioned; and all courts, judges, and other persons whomsoever shall take notice of such seal, and receive impressions thereof in evidence in like manner as impressions of the seal of the Colony are received in evidence; and copies or extracts certified and sealed with such seal, of Letters Patent, Specifications, Disclaimers, Memoranda of Alterations, and all other documents or books recorded, filed, and kept in pursuance of this Act, shall be received in evidence in all proceedings relating to Letters Patent for inventions in all Courts, and by all judges and other persons whomsoever.

38. If any person wilfully makes, or causes to be made, any false entry in the said register of proprietors, or wilfully makes or forges, or causes to be made or forged, any writing falsely purporting to be a copy of any entry in the said book, or produces or tenders, or causes or suffers to be produced or tendered in evidence any such writing knowing the same to be false or forged, he shall be guilty of a misdemeanor, and shall be liable to be imprisoned, with or without hard labour, for any term not exceeding two years, or be fined and imprisoned at the discretion of the court.

39. If any person deems himself aggrieved by any entry made under colour of this Act in the said registry of proprietors, it shall be lawful for such person to apply by motion to the Supreme Court in Term time, or by summons to a judge of such court in vacation, for an order that such entry may be expunged, vacated, or varied; and upon any such application, such court or judge respectively may make such order for expunging, vacating, or varying such entry, and as to the costs of such application, as to such court or judge may seem fit; and the officer having the care and custody of such register, on the production to him of any such order, shall expunge, vacate, or vary the said entry according to the requisition of such order.

40. If any person writes, paints, prints, moulds, casts, carves, engraves, stamps, or otherwise marks upon anything made, used, or sold by him, for the sole making or selling of which he has not obtained Letters Patent, the name or any imitation of the name of any other person who has obtained Letters Patent for the sole making and vending of such thing, without leave in writing of such Patentee or his assigns, or if any person upon such thing, not having been purchased from the Patentee, or some person who purchased it from or under such Patentee, or not having had the licence or consent in writing of such Patentee or his assigns, writes, paints, prints, moulds, casts, carves, engraves, stamps, or otherwise marks the word "Patent," the words "Letters Patent," or the words "by the Queen's Patent," or any words of the like kind, meaning, or import, with a view of imitating or counterfeiting the stamp, mark, or other device of the Patentee, he shall for every such offence forfeit and pay the sum of one hundred pounds, one half to Her Majesty, and the other half with full costs of suit to any person who sues for the said penalty by action of debt: Provided always, that nothing herein contained shall be construed to extend to subject any person to any penalty in respect of stamping or in any way marking the word "Patent" upon anything made for the sole making or vending of which Letters Patent before obtained have expired or been otherwise determined.

41. In any action for the infringement of Letters Patent the plaintiff shall deliver with his declaration particulars of the breaches complained of in the said action, and the defendant on pleading thereto shall deliver with his pleas, and the prosecutor in any proceeding by *scire facias* to repeal Letters Patent shall deliver with his declaration, particulars of any objections on which he means to rely at the trial in support of the pleas in the said action, or of the suggestions of the said declaration in the proceeding by *scire facias* respectively; and at the trial of such action or proceeding by *scire facias* no evidence shall be allowed to be given in support of any alleged infringement, or of any objection impeaching the validity of such Letters Patent which are not contained in the particulars delivered as aforesaid: Provided always, that the place at or in which and in what manner the invention is alleged to have been used or published prior to the date of the Letters Patent shall be stated in such particulars: Provided also, that it shall and may be lawful for any judge at chambers to allow such plaintiff or defendant or prosecutor respectively to amend the particulars delivered as aforesaid, upon such terms as to such judge seems fit: Provided also, that at the trial of any proceeding by *scire facias* to repeal Letters Patent the defendant shall be entitled to begin and to give evidence in support of such Letters Patent; and in case evidence is adduced on the part of the prosecutor impeaching the validity of such Letters Patent, the defendant shall be entitled to the reply.

42. In any action for the infringement of Letters Patent, it shall be lawful for the court, if the court is then sitting, or if the court is not sitting then for a judge, on the application of the plaintiff or defendant respectively, to make such order for an injunction, inspection, or account, and to give such direction respecting such action, injunction, inspection, and account, and the proceedings therein respectively, as to such court or judge may seem fit.

43. In taxing the costs in any action for infringing Letters Patent, regard shall be had to the particulars delivered in such action, and the plaintiff and defendant respectively shall not be allowed any costs in respect of any particular unless certified by the judge before whom the trial was had to have been proved by such plaintiff or defendant respectively, without regard to the general costs of the cause; and it shall be lawful for the judge before whom any such action is tried to certify on the record that the validity of the Letters Patent in the declaration mentioned came in question; and the record with such certificate being given in evidence in any suit or action for infringing the said Letters Patent, or in any proceeding by *scire facias* to repeal the Letters Patent, shall entitle the plaintiff in any such suit or action, or the defendant in such proceeding by *scire facias*, on obtaining a decree, decretal order, or final judgment, to his full costs, charges, and expenses taxed as between attorney and client, unless the judge making such decree or order, or the judge trying such action or proceeding, certifies that the plaintiff or defendant respectively ought not to have such full costs.

44. There shall be paid in respect of Letters Patent applied for or issued under or in pursuance of this Act, the depositing of Specifications, the filing of disclaimers and memoranda of alterations, certificates, entries, and searches, and other matters and things respectively mentioned in the Schedule, such fees as are enumerated in the Schedule; and such of the said fees as are thereby made payable to the law officer shall and may be received and retained by such law officer for his own proper use; and the residue of the said fees shall form part of the general revenue, and shall be forthwith paid into the colonial treasury by the persons receiving the same in pursuance of this Act.

45. All Letters Patent which are granted in the United Kingdom of Great Britain and Ireland after the thirtieth day of June, 1859, for any invention, shall, so far as the same relate to this Colony, be utterly void and of none effect, and in nowise be put

in execution; but all such Letters Patent granted in the said United Kingdom on or before that day, and which if this Act had not been passed would have been valid in this Colony, shall be deemed and taken to have been granted under this Act, and may be dealt with accordingly.

46. The Governor in Council may, if he thinks fit, vary and alter the several Forms in the Schedule as occasion may require.

47. In referring to this Act it shall be sufficient to use the expression The Patent Law Act.

SCHEDULE.

Forms.

Petition.

No.

To his Excellency the Governor of the Colony of Tasmania.

The humble petition of [*here insert Name and Address of Petitioner*] for, *&c.*

Showeth,

That your Petitioner is in possession of an invention for

[*the title of the invention,*]

which invention he believes will be of great public utility; that he is the true and first inventor thereof; and that the same has not been before made or used in this Colony by any other person or persons, to the best of his knowledge and belief.

Your petitioner therefore humbly prays, that Your Excellency will be pleased to grant unto him, his executors, administrators, and assigns, Letters Patent for the term of fourteen years, pursuant to the provisions of The Patent Law Act.

And your petitioner will ever pray, *&c.*

Declaration.

No.

I, *A.B.*, of in Tasmania, do hereby solemnly and sincerely declare, that I am in possession of an invention for, *&c.*

[*the title as in petition,*]

which invention I believe will be of great public utility; that I am the true and first inventor thereof; and that the same has not been before made or used in this Colony by any other person or persons, to the best of my knowledge and belief; and that the instrument in writing under my hand and seal, hereunto annexed, particularly describes and ascertains the nature of the said invention, and the manner in which the same is to be performed; all which matters I conscientiously believe to be true; and I make this declaration under the provisions of the Act of Council, intituled *An Act for the abolition of extra-judicial and unnecessary Oaths.*

A.B.

Taken before me this day of 1858.

C.D.
Justice of the Peace.

Specification.

No.

To all to whom these presents come,

I *A.B.* of in Tasmania, Engineer, send greeting:

Whereas I am desirous of obtaining Letters Patent for securing unto me Her Majesty's special Licence that I, my executors, administrators, and assigns, or such others as I or they should at any time agree with, and no others, should and lawfully might from time to time, and at all times during the term of fourteen years, to be computed from the day on which this instrument is left at the office of the Colonial Secretary at Hobart Town, make, use, exercise, and vend, within the colony of Tasmania, an invention for [*insert the title of the invention*]; and in order to obtain the said Letters Patent I must by an instrument in writing under my hand and seal particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed: Now know ye, that I the said *A.B.* do hereby declare the nature of the said invention, and the manner in which the same is to be performed, to be particularly described and ascertained in and by the following statement; that is to say,

[*describe the invention.*]

In witness whereof, I the said *A.B*, have hereunto set my hand and seal this day of 1858.

A. B. (L.S.)

Appointment to hear Application for Letters Patent.

Patent for [*insert the title as in the specification*]. This is to notify that *A.B.* of in Tasmania, Engineer, did on the day of instant [*or* last] deposit at the Office of the Colonial Secretary at Hobart Town a specification or instrument in writing under his hand and seal particularly describing and ascertaining the nature of the said invention, and in what manner the same is to be performed, and that by reason of such deposit the said invention is protected and secured to him exclusively for the term of six months then next ensuing: And I do further notify that the said *A.B.* has given notice in writing at my office of his intention to proceed with his application for Letters Patent for the said invention, and that I have appointed [*Thursday*] the day of next, at o'clock in the noon, at my office, to hear and consider the said application, and all objections thereto; and I do hereby require all persons having an interest in opposing the grant of such said Letters Patent to leave before that day at my office at Hobart Town particulars in writing of their objections to the said application, otherwise they will be precluded from urging the same.

Given under my hand this day of 1858.

F. S. [Attorney] General,
Macquarie-street, Hobart Town.

Warrant.

I have heard and considered the application of *A.B.* of in Tasmania, Engineer, for Letters Patent for [*insert the title as in the specification*] and [also all objections to the same, *if any,*] and having perused the specification and the usual and necessary

advertisements, am of opinion that as it is entirely at the hazard of the said applicant whether the said invention is new and will have the desired success, Letters Patent may be issued to the said *A. B.*, in the form contained in the Schedule to *the Patent Law Act*; [with the following additional clauses; that is to say, *here set them out, if any*].

Given under my hand and seal this day of 1858.

F. S. (L.S.)
[Attorney] General.

Letters Patent.

VICTORIA, by the Grace of God, of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith:

To all to whom these presents come, greeting:

Whereas *A.B.* of in Tasmania, Engineer, has represented that he is desirous of obtaining Letters Patent for securing unto him Our special Licence that he, his executors, administrators, and assigns, and such others as he or they should agree with, and no others, should and lawfully might make, use, exercise, and vend within Our Colony of Tasmania an invention for [*insert the title of the invention*]; and by an instrument in writing under his hand and seal deposited in the office of the Colonial Secretary, the said *A.B.* has particularly described and ascertained the nature of the said invention, and in what manner the same is to be performed:

And We, being willing to give encouragement to all Arts and Inventions which may be for the public good, are graciously pleased to confer upon the said *A.B.* the privileges herein-after mentioned: Know ye, therefore, that We, of Our especial grace, certain knowledge, and mere motion, have given and granted, and by these Presents, for Us, Our heirs and successors, do give and grant unto the said *A.B.*, his executors, administrators, and assigns, Our especial licence, full power, sole privilege, and authority that he the said *A.B.*, his executors, administrators, and assigns, and every of them, by himself and themselves, and his or their deputy or deputies, servants or agents, or such others as he or they at any time agree with, and no others, during the term herein expressed, shall and lawfully may make, use, exercise, and vend his said invention within Our said Colony in such manner as to him, his executors, administrators, and assigns, or any of them, seems meet, and that he, his executors, administrators, and assigns, shall and lawfully may have and enjoy the whole profit, benefit, commodity, and advantage, from time to time coming, growing, accruing, and arising by reason of the said invention during the said term; to have, hold, exercise, and enjoy the said licences, powers, privileges, and advantages unto and by the said *A.B.*, his executors, administrators, and assigns, for and during and unto the full end and term of fourteen years now next ensuing: And to the end that the said *A.B.*, his executors, administrators, and assigns, and every of them, may have and enjoy the full benefit, and the sole use and exercise, of the said invention according to Our gracious intention, We do by these Presents, for Us, Our heirs and successors, require and strictly command all and every person and persons, bodies politic and corporate, and all other Our subjects whatsoever, of what estate, quality, degree, name, or condition soever they be, within Our said Colony, that neither they nor any of them at any time during the said term, either directly or indirectly, do make, use, or put in practice the said invention or any part of the same so attained unto by the said *A.B.* as aforesaid, nor in anywise counterfeit, imitate, or resemble the same, nor make or cause to be made any addition thereunto or subtraction from the same whereby to pretend himself or themselves the inventor or inventors, devisor or devisors thereof, without the consent, licence, or agreement of the said *A.B.*, his executors, administrators, or assigns, in writing under his or their hands and seals first had and obtained in that behalf, upon such pains and penalties as can or may be justly inflicted on such offenders for their contempt of this Our Royal command, and further to be answerable to the said *A.B.*, his executors, administrators, and assigns, according to law for his and their damages thereby occasioned: Provided always, and these Our Letters Patent are and shall be upon this condition, that if at any time during the said term hereby granted it appears that this Our grant is contrary to law or prejudicial or inconvenient to Our subjects in general, or that the said invention is not a new invention as to the public use and exercise thereof, or that the said *A.B.* is not the true and first inventor thereof within this Colony, these Our Letters Patent shall forthwith cease, determine, and be utterly void to all intents and purposes, anything herein-before contained to the contrary thereof in anywise notwithstanding: Provided also, that these Our Letters Patent, or anything herein contained, shall not extend or be construed to extend to give privilege unto the said *A.B.*, his executors, administrators, or assigns, or any of them, to use or imitate any invention or work whatsoever which has heretofore been found out or invented by any other of Our subjects whatsoever and publicly used or exercised, unto whom Our like Letters Patent or privileges have been already granted for the sole use, exercise, and benefit thereof within Our said Colony: It being Our will and pleasure that the said *A.B.*, his executors, administrators, and assigns, and all and every other person and persons to whom like Letters Patent or privileges have been already granted as aforesaid, shall distinctly use and practise their several inventions by them invented and found out according to the true intent and meaning of the same respective Letters Patent and of these Presents: Provided likewise nevertheless, and these Our Letters Patent are upon this express condition, that if the said instrument in writing does not particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed, and also if the said *A.B.*, his executors, administrators, and assigns, shall not pay at the office of the Colonial Treasurer of Our said Colony the sum of fifteen pounds within three years next after the date of these Presents, and the sum of twenty pounds within seven years next after such date, and also if the said *A.B.*, his executors, administrators, or assigns, shall not supply or cause to be supplied for Our service all such articles of the said invention as he or they are required to supply by the persons administering the department of Our service for the use of which the same are required, in such manner, at such times, and at and upon such reasonable prices and terms as are settled for that purpose by the said persons requiring the same, that then and in any of the said cases these Our Letters Patent, and all liberties and advantages whatsoever hereby granted, shall utterly cease, determine, and become void, anything herein-before contained to the contrary thereof in anywise notwith-

standing: Provided, that nothing herein contained shall prevent the granting of licences in such manner and for such considerations as they may by law be granted: And lastly We do by these Presents, for Us, Our heirs and successors, grant unto the said *A.B.*, his executors, administrators, and assigns, that these Our Letters Patent shall be in and by all things good, firm, valid, sufficient and effectual in the law according to the true intent and meaning thereof, and shall be taken, construed, and adjudged in the most favourable and beneficial sense for the best advantage of the said *A.B.*, his executors, administrators, and assigns, as well as in all Our Courts of Record as elsewhere, and by all and singular the officers and ministers whatsoever of Us, Our heirs and successors, in Our said Colony, and amongst all and every the subjects of Us, Our heirs and successors, whatsoever and wheresoever, notwithstanding the not full and certain describing the nature or quality of the said invention, or of the materials thereunto conducing and belonging. In witness whereof We have caused these Our Letters to be made Patent, and to be sealed and bear date as of the
day of 1858.

Appointment to hear Application for Leave to enter Disclaimer.

Patent for [*insert title*]. This is to notify that *C.D.* of in Tasmania has applied to me for leave to enter a disclaimer of part of [*or* a memorandum of alteration in] the title of the said invention [*or as the case may be*] the particulars whereof are stated below; I do therefore appoint [*Thursday*] the day of next at o'clock in the noon, at my office, to hear and consider the said application, and all objections to the same; and I do hereby require all persons having an interest in opposing the said application to leave before that day, at my office at Hobart Town, particulars in writing of their objection to the same, otherwise they will be precluded from urging such objections.

Given under my hand this
day of 1858.

F.S. [Attorney] General,
Macquarie Street, Hobart Town.

The following is the disclaimer [*or as the case may be*] which I desire to make in, *&c.* [*The applicant must here set forth what he wishes to enter, and the reasons for the disclaimer, and sign it.*]

Notice of Appointment of Commission.

Patent for [*insert the title*]. Notice is hereby given that I have presented a petition to His Excellency the Governor praying for the confirmation of [*or* extension of the term in, *or as the case may be*] the said Patent; and that a Commission has issued authorizing and requiring certain Commissioners therein named to consider and report upon the subject to His Excellency the Governor, which said Commissioners will meet for that purpose on the day of next at o'clock in the noon at :
All persons objecting to the said confirmation [*or* extension, *or as the case may be*] must enter a caveat against the same at the office of the Colonial Secretary at Hobart Town, not less than one week before the time named for the said meeting, otherwise they will be precluded from objecting to the said petition.

Dated this day of 1858.

A.B.

FEES.

Fees on Obtaining Patents.

	£	s.	d.
On depositing specification - - -	2	10	0
To the law officer for any appointment -	2	4	6
On obtaining Letters Patent - -	2	10	0
At or before the expiration of the third year	15	0	0
At or before the expiration of the seventh year - - - - - - -	20	0	0
To the law officer with particulars of objections - - - - - - -	2	4	6
On presenting petition for extension or confirmation - - - -	2	10	0
Every search and inspection - - -	0	1	0
Entry of assignment or licence - -	0	10	0
Certificate of assignment or licence -	0	10	0
Filing disclaimer or memorandum of alteration - - - - - - -	2	10	0
Entering any caveat - - - -	2	10	0
Copy or extract of any writing, per common law folio - - - - -	0	1	0

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Sweden, Nos. 327 and 354.
United States of America, Nos. 633, 646, and 789.
Victoria, Nos. 186 and 359.
Wurtemberg, No. 314.

List of Specifications published during the week ending 29th March, 1862.

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PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March „
268	„ April to June „
291	„ July to September „
321	„ October to December „
345	A.D. 1854—January to March „
371	„ April to June „
399	„ July to September „
424	„ October to December „
451	A.D. 1855—January to March „
475	„ April to June „
505	„ July to September „
527	„ October to December „
553	A.D. 1856—January to March „
579	„ April to June „
605	„ July to September „
632	„ October to December „
660	A.D. 1857—January to March „
684	„ April to June „
712	„ July to September „
737	„ October to December „
761	A.D. 1858—January to March „
789	„ April to June „
815	„ July to September „
842	„ October to December „

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712	„ July to September „
737	„ October to December „
761	A.D. 1854—January to March „
789	„ April to June „
815	„ July to September „
842	„ October to December „

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Applications for Letters Patent.

(*1st, 2nd, and 3rd April*, 1862.)

905. JOHN TAYLOR GURNEY STONE, of 74, St. John's Road, Hoxton, in the county of Middlesex, Manufacturer, for an invention of "An improved bustle and petticoat."—Dated 1st April, 1862.

906. PIERRE RAYMOND COUCHOUD, of No. 71, Rue de Rambuteau, in the city of Paris, in the empire of France, Lace Manufacturer, for an invention of "A loom for manufacturing chenille and other lace-work."—Dated 1st April, 1862.

907. CÉLESTIN PHILIPPE GONTARD, of Besançon, in the empire of France, Watch Maker, for an invention of "An improved stopping piece for watches and other time keepers intended to limit the winding up of the moving spring."—Dated [illegible] 1862.

1st April, [illegible] of 53, Chancery Lane,

908. WILLIAM CLARK, of [illegible] Patent [illegible] of Middlesex, Engineer and Pat[illegible] in the county [illegible] rements in Agent, for an invention of "Impro[illegible] the manufacture of manure."—A communication to him from abroad by Mr. Leopold Eugène Lavigne, of 29, Boulevart St. Martin, Paris, in the empire of France, Civil Engineer.—Dated 1st April, 1862.

909. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in kneading machines."—A communication to him from abroad by Mr. Ovide Isidore Boland, of 29, Boulevart St. Martin, Paris, in the empire of France, Proprietor.—Dated 1st April, 1862.

910. MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "An improved furnace for treating iron ore."—A communication to him from abroad by Joseph Alexandre Marcel Bonne, of Cluis, in the French empire.—Complete specification.—Dated 1st April, 1862.

911. WILLIAM TURNER, of The Steam Bakery, No. 39, Hockley, in the town and county of the town of Nottingham, Baker and Flour Dealer, for an invention of "Improvements in machinery or apparatus employed in the manufacture of dough, and especially of fermented dough."—Dated 1st April, 1862.

912. FREDERICK KNUDSEN, in the employ of M. F. Dent, of 33 and 34, Cockspur Street, Charing Cross, in the county of Middlesex, for an invention of "Improvements in chronometers."—Dated 1st April, 1862.

913. HENRY SMITH, of the Teesdale Iron Works, Stockton-on-Tees, in the county of Durham, for an invention of "Improvements in apparatus used when casting iron or other metal."—Dated 1st April, 1862.

914. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of [illegible] for [illegible] "Improvements in machinery or [illegible] spinning cotton and other fibrous substances."—A communication to him from abroad by James Eaton, of Boston, in the state of Massachusetts, United States of America. — Dated 1st April, 1862.

915. HENRY WILLIAM CASLON and GEORGE FAGG, both of Chiswell Street, in the county of Middlesex, Typefounders, for an invention of "Improvements in casting printing types, and in apparatus for rubbing the same."—Dated 1st April, 1862.

916. HARRY WALTON WHITEHEAD, of the firm of Taylor, Wordsworth, and Co., of Leeds, in the county of York, Machine and Tool Makers, and GEORGE BRAY, of Leeds, aforesaid, Carding Engineer, for an invention of "Improvements in machinery for carding wool and other fibrous substances."—Dated 1st April, 1862.

917. Edmund Hartley, of Oldham, in the county of Lancaster, Machinist, George Little, of the same place, Machinist, and John Hinchcliffe, of same place, Smith, for an invention of "Improvements in rolling or straightening metal spindles, shafts, or rods of a cylindrical or tapered form."—Dated 1st April, 1862.

918. John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for an invention of "Improvements in mules for spinning and doubling."—Dated 1st April, 1862.

919. Henry Joseph Madge, of Swansea, in the county of Glamorgan, Tin Plate Manufacturer, for an invention of "Improvements in coating iron sheets or plates, to be used as a substitute for tin or terne plates."—Dated 1st April, 1862.

920. John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for an invention of "Improvements in machinery or apparatus used for applying motive power derived from bullocks, horses, or other animals."—Dated 1st April, 1862.

921. Herrman Lorenz and Theodor Vette, of Berlin, in the kingdom of Prussia, for an invention of "Improvements in filters."—Dated 1st April, 1862.

922. William Currie Harrison, of 15, Sutherland Place, Pimlico, in the county of Middlesex, Civil Engineer, and Henry John Standly, of 20, Cockspur Street, Westminster, in the county of Middlesex, Esquire, for an invention of "An improved instrument or tool for boring or drilling holes in slate or other rock."—Dated 2nd April, 1862.

923. George Holcroft, of the city of Manchester, Consulting Engineer, for an invention of "Improvements in the construction of blast furnaces."—Dated 2nd April, 1862.

924. The Reverend George Scratton, of Stickney, in the county of Lincoln, Clerk, for an invention of "Improvements in shades or blinds for windows."—Dated 2nd April, 1862.

925. Samuel Warren, of Ledbury, in the county of Hereford, Engineer and Agricultural Implement Maker, for an invention of "Improvements in machinery for transmitting motion obtained by animal power to agricultural and other machines."—Dated 2nd April, 1862.

926. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in memorandum pocket and other books, and in pencil and pen holders to be used therewith."—A communication to him from abroad by Eugene Recordon, of Vaison, Vaucluse, France.—Dated 2nd April, 1862.

927. William Malam, of Skinner Street, in the city of London, Gas Engineer, for an invention of "An improvement in the manufacture of gas and improved apparatus to be employed in such manufacture."—Dated 2nd April, 1862.

928. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the invention of "Improvements in bits for taming or subduing vicious horses and breaking colts."—A communication to him from abroad by Aurelius Langdon, Weymouth, of Boston, Massachusetts, United States of America.—Dated 2nd April, 1862.

929. George Collier and John Collier, both of Halifax, in the county of York, Machinists, for an invention of "Improvements in looms for weaving carpets and other pile fabrics."—Dated 2nd April, 1862.

930. Bewicke Blackburn, of York Buildings, Adelphi, in the county of Middlesex, for an invention for "Improvements in apparatus for lubricating locomotive and other axles."—Dated 2nd April, 1862.

931. Samuel Hunter, of 22, Grey Street, Newcastle-upon-Tyne, for an invention of "Improvements in anchors."—Dated 2nd April, 1862.

932. Thomas Moore, of No. 33, Regent Circus, Piccadilly, in the county of Middlesex, for an invention of "Improvements in winding apparatus especially applicable to fishing lines, nets, and log lines, and in leaders or travellers to be used therewith, which leaders or travellers are also applicable to working ships' sails, and other useful purposes."—Dated 2nd April, 1862.

933. John Thomas Loft, of Brooklyn, New York, United States of America, but now residing at Berwick Street, Pimlico, in the county of Middlesex, Architect, for an invention of "Improved machinery for printing in colours."—Dated 2nd April, 1862.

934. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "An improved apparatus for manifold writing."—A communication to him from abroad by Mr. Joseph Charles Thomas Devaux, of 29, Boulevart St. Martin, Paris, in the empire of France, Civil Engineer."—Dated 2nd April, 1862.

935. William Leopard, of Hurstpierpoint, in the county of Sussex, Corn Merchant, for an invention of "Improvements in railway brake apparatus."—Dated 2nd April, 1862.

936. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the manufacture of carbonic acid."—A communication to him from abroad by Messrs. Louis Joseph Frédéric Margueritte, and Alfred Lalouël de Sourdeval, both of 29, Boulevart St. Martin, Paris, Chemists.—Dated 2nd April, 1862.

937. Gustave Rebour, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, Advocate, for an invention of "A permanent autographic log serving to measure, and if needed to retrace graphically the swiftness and sailing of a ship, the rapidity of streams, and the propelling of rising and ebbing tides."—Dated 3rd April, 1862.

938. William Helme, of Caldbeck, in the county of Cumberland, for an invention of "Improvements in firelighters."—Dated 3rd April, 1862.

939. Robert Morton, Engineer and Brass Founder, Stockton-on-Tees, for an invention of "Im-

provements in refrigerators or apparatus for cooling liquids, parts of which improvements are also applicable to distillation, surface condensation, heating air for blast furnaces, and other similar purposes."—Dated 3rd April, 1862.

940. George Bower, of Ashton-under-Line, in the county of Lancaster, Ironmoulder, and John Qualter, of Dukinfield, in the county of Chester, Blacksmith, for an invention of "Certain improvements in metallic pistons."—Dated 3rd April, 1862.

941. John Newton, of No. 5, Montpellier Road, Rye Lane, Peckham, in the county of Surrey, Contractor, for an invention of "Improvements in the construction of breakwaters, piers, and sea walls."—Dated 3rd April, 1862.

942. George Hunter, of Coleford, in the county of Gloucester, Engineer, for an invention of "Improvements in machinery and tools for cutting, sawing, and planing stone, marble, and slate."—Dated 3rd April, 1862.

943. Robert Moore Toogood and John Laybourne, both of Newport, in the county of Monmouth, Engineers, trading as "The Isca Foundry Company," for an invention of "An improvement in railway crossings."—Dated 3rd April, 1862.

944. William Kemp, of 20, Spital Spuare, and Thomas Cowley, of Harts Lane, Bethnal Green Road, both in the county of Middlesex, for an invention of "Improvements in the manufacture of silk pile velvet."—Dated 3rd April, 1862.

945. Mark Amos, of Westbury-on-Tryn, in the county of Gloucester, for an invention of "Improvements in harrows.—Dated 3rd April, 1862.

946. David Wilson, of Wandsworth Common, in the county of Surrey, and Edward Alfred Cowper, of No. 35a, Great George Street, Westminster, for an invention of "Improvements in presses for pressing cotton fibrous materials and hay."—Dated 3rd April, 1862.

947. Joseph Lee, of the Traction Engine Works, Lincoln, for an invention of "Improvements in traction engines and boilers for traction, locomotive, and other purposes."—Dated 3rd April, 1662.

948. Alexander Mann, of Tottenham, in the county of Middlesex, for an invention of "Improvements in photographic apparatus."—Dated 3rd April, 1862.

949. William Antil Richards, of Chester Cottage, Cornwall Place, Holloway, in the county of Middlesex, Commercial Clerk, for an invention of "Improvements in the manufacture of bags, and in fastenings and locks for bags, parts of the invention being also applicable to purses, cigar cases, reticules, and other similar articles."—Dated 3rd April, 1862.

950. Henry Thomas Hassall, of the firm of Hassall and Co., of Birmingham, in the county of Warwick, Manufacturers, and Michael Burke, of Liverpool, in the county of Lancaster, Cabinet Maker, for an invention of "Improvements in reclining or invalids' chairs, and in swinging or ships' chairs."—Dated 3rd April, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

3062. To Frederick Vetterlin, of No 14, Scarborough Street, Goodman's Fields, in the county of Middlesex, Engineer, for the invention of "Improvements in breech-loading ordnance, and the projectiles to be used therewith, which may also be applied to small arms."

On his petition, recorded in the Office of the Commissioners on the 16th day of December, 1861.

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119. To Edward Henry Cradock Monckton, of Fineshade, in the county of Northampton, Esquire, for the invention of "Improvements in apparatus for obtaining and applying motive power."

On his petition, recorded in the Office of the Commissioners on the 16th day of January, 1862.

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149. To Robert Ogden Doremus and Bern. L. Budd, of New York, United States of America, Chemists, for the invention of "Improvements in making cartridges."

On their petition, recorded in the Office of the Commissioners on the 20th day of January, 1862.

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188. To Timothy Morris and Robert Weare, both of Birmingham, in the county of Warwick, Electricians, and Edward Henry Cradock Monckton, of Fineshade, in the county of Northampton, Esquire, for the invention of "Improvements in submarine and other telegraphic communication, and in apparatus connected therewith."

On their petition, recorded in the Office of the Commissioners on the 24th day of January, 1862.

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291. To Charles Marien Roullier, of Paris, Manufacturer, for the invention of "Improvements in the manufacture of straps, bands, chains, and other like articles."

On his petition, recorded in the Office of the Commissioners on the 4th day of February, 1862.

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315. To Peter Hyde Astley, of No. 4, Matthew's Place, Stratford, Essex, and Crosby Leighton, of 3, Manby Grove, Manby Park, Stratford, Essex, for the invention of "Improvement in the construction of life boats, applicable also to ships' boats, gun boats, and other vessels."

On their petition, recorded in the Office of the Commissioners on the 6th day of February, 1862.

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387. To Richard Hornsby, junior, of the Spittlegate Works, Grantham, in the county of Lincoln, for the invention of "Improvements in apparatus for thrashing, elevating, cleansing, and separating grain, and in apparatus for elevating straw."

On his petition, recorded in the Office of the Commissioners on the 13th day of February, 1862.

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439. To Frederic Barnett, residing at 230, Oxford Street, London, for the invention of "An improved lamp or lantern for street lighting and other purposes."

441. And to NATHANIEL SYMONS, Iron Founder, of No. 6, Cambridge Street, St. Pancras, London, Middlesex, for the invention of "Improvements in steam-engines for increasing the powers thereof by a different form of piston, internal top and bottom of cylinder."
On both their petitions, recorded in the Office of the Commissioners on the 19th day of February, 1862.

475. To GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the county of Surrey, for the invention of "Improvements in apparatus for elevating hay, straw, and earth."—A communication to him from abroad by Levi Beardsley, a person resident at Boston, United States of America.
On his petition, recorded in the Office of the Commissioners on the 22nd day of February, 1862.

494. To THOMAS PARTRIDGE, senior, of 50, Tenby Street, Birmingham, in the county of Warwick, for the invention of "Improvements in apparatus for printing railway and other tickets or cards."
On his petition, recorded in the Office of the Commissioners on the 24th day of February, 1862.

510. To JOSEPH WHITWORTH, of Manchester, in the county of Lancaster, for the invention of "Improvements in manufacturing and preparing projectiles, and in apparatus to be used for those purposes."
On his petition, recorded in the Office of the Commissioners on the 25th day of February, 1862.

540. To ROBERT SEAGER, of Ipswich, in the county of Suffolk, for the invention of "Improvements in the manufacture of boots and shoes, and in apparatus employed therein."
On his petition, recorded in the Office of the Commissioners on the 27th day of February, 1862.

619. To ALEXANDER WILLIAM WILLIAMSON, of the University College, in the county of Middlesex, for the invention of "Improvements in apparatus for generating steam, or for generating and superheating steam."
On his petition, recorded in the Office of the Commissioners on the 8th day of March, 1862.

648. To JOHN THOMAS CALOW, of Staveley, in the county of Derby, Manufacturer, for the invention of "An improvad safety apparatus applicable to cages or hoists used in mining or lifting machines."
On his petition, recorded in the Office of the Commissioners on the 10th day of March, 1862.

678. To EDWARD GERARD FITTON, of Ardwick, in the county of Lancaster, Machinist, for the invention of "Improvements in machinery for winding yarn or thread on to bobbins or spools."
On his petition, recorded in the Office of the Commissioners on the 12th day of March, 1862.

682. To LUCIEN VIDIE, of Paris, France, Gentleman, for the invention of "Improvements in the construction of aneroid barometers, partly applicable to steam gauges."

683. To JOHN CUNNINGHAM and ROBERT CUNNINGHAM, both of Paisley, in the county of Renfrew, North Britain, Card Perforators, for the invention of "An improved ornamental fabric, and improvements in weaving and in jacquard apparatus."

685. To GODFREY ERMEN, of Manchester, in the county of Lancaster, Sewing Thread Manufacturer, for the invention of "An improved receptacle or case for the protection of threads, of cotton, silk, or other fibrous substances when in a 'spooled,' 'balled,' or otherwise wound state, or for the reception of 'tapes.'"

687. To JAMES WADSWORTH, of Salford, near Manchester, in the county of Lancaster, Machinist, for the invention of "Improvements in the construction and manufacture of moveable or adjustable heels for boots and shoes."

689. To EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for the invention of "Improvements in furnaces for consuming smoke."—A communication to him from abroad by Napoléon Félix Boruko de Chodzko and Jean Louis Lebeaux, of Paris.

691. To MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in stuffing boxes."—A communication to him from abroad by Francisque Million, of 33, Boulevard Saint Martin, Paris, France.

693. To GEORGE CALVERT, of Islington, in the county of Middlesex, Ironmonger, for the invention of "Improvements in castors."

695. To JOSEPH BENNETT HOWELL, of the firm of Shortridge, Howell, and Co., Steel Manufacturers, of Sheffield, in the county of York, for the invention of "Improvements in the manufacture of chains and chain cables."

697. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "An improvement in armour plates for vessels of war."—A communication to him from abroad by Edward Cox, of Covington, state of Kentucky, United States of America.

699. And to RUDOLPH SCHOMBURG, of No. 90, Cannon Street, in the city of London, and ADOLPH BALDAMUS, of Charlottenburg, in the city of Berlin, in the kingdom of Prussia, for the invention of "Improvements in purifying illuminating gas."
On their several petitions, recorded in the Office of the Commissioners on the 13th day of March, 1862.

701. To ALEXANDRE QUINARD, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, Hardware Manufacturer, for the invention of "A machine for manufacturing horseshoe nails."

703. To GEORGE HENRY BIRKBECK, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for the invention of "Improvements in trusses or bandages, and in pessaries to be used therewith when required."—A communication to him from abroad by M. Louis Polydore Grandcollot, of Paris, in the empire of France.

704. To GEORGE BENNET, of No. 21, Manchester Buildings, Westminster, in the county of Middlesex, for the invention of "An improvement in the coating and covering of wrought iron for the purpose of preserving it and preventing oxidation."

705. To George Henry Sanborn, of Boston, state of Massachusetts, United States of America, for the invention of "Improvements in gas regulators."—A communication from Jeremiah Henry Norton, a person resident at Boston, Massachusetts, United States of America.

707. To George Tomlinson Bousfield, of Loughborough Park, in the county of Surrey, for the invention of "Improvements in machinery for digging and disintegrating the earth for agricultural purposes."—A communication to him from abroad by Elias Howe, junior, a person resident at Brooklyn, state of New York, United States of America.

709. And to Matthew Andrew Muir, of Glasgow, in the county of Lanark, North Britain, Machinist, and James McIlwham, of the same place, Machinist, for the invention of "Improvements in railway sleepers and chairs and in the mode of fixing rails."

On their several petitions, recorded in the Office of the Commissioners on the 14th day of March, 1862.

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711. To Alfred Coles and William Coles, both of Wych Street, Strand, in the county of Middlesex, Truss Makers, for the invention of "Improvements in the construction of trusses for cases of hernia."

713. To Harry Emanuel, of Brook Street, Hanover Square, in the county of Middlesex, Court Jeweller, for the invention of "An improvement in the manufacture of ornaments for personal wear."

715. To George Brooks Pettit, of New Oxford Street, in the county of Middlesex, for the invention of "An improved method of, and apparatus for heating water and other liquids, applicable also to the evaporation of liquids."

716. To Julien Smadja, of 16, Stamford Street, of the parish of Christchurch, in the county of Surrey, Merchant, for the invention of "Improvements in bustles and crinolines, and in materials used in their construction."

717. To William McAdam, of Glasgow, in the county of Lanark, North Britain, Pottery and Glass Manufacturer, for the invention of "Improvements in the manufacture of blocks, pulleys, and weights for window sashes and other purposes, and in the mode of applying the same."

719. To John Grant, of Albion Place, Maidstone, in the county of Kent, Farmer, for the invention of "Improvements in the construction of portable railways, and in the trucks or carriages to be used thereon."

721. To Sublime Napoléon De la Haye de Barbezières, of Paris, in the empire of France, Barrister in the Imperial Court of Paris, for the invention of "An improved construction of horse shoe."

723. To George Hamilton, of No. 6, Willow Terrace, Islington, in the county of Middlesex, for the invention of "Improvements in tumbler locks."

725. And to William Pickstone, of Radcliffe, in the county of Lancaster, for the invention of "Improvements in the manufacture of piled fabrics."

On their several petitions, recorded in the Office of the Commissioners on the 15th day of March, 1862.

727. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in water meters."—A communication to him from abroad by Mr. Frank Grant Johnson, of Brooklyn, King's County, state of New York, United States of America, Doctor of Medicine.

731. To Louis Pierre Mongruel, of 7, Rue Vivienne, Paris, in the empire of France, for the invention of "An improved cold vapour generator, which may also be used in the carburation of illuminating gas."

733. To George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for the invention of "Improved apparatus for drawing."—A communication to him from abroad by Joséphin Soulary, of Paris, France.

737. To William Barber, of Stockport, in the county of Chester, for the invention of "Improvements in the manufacture of hats."

739. To John Minton Courtauld, of Braintree, in the county of Essex, Manufacturer, for the invention of "Improvements in power looms."

741. To Ephraim Smith, of Carlisle Street, Soho, in the county of Middlesex, Jeweller, for the invention of "An improvement in watch keys."

743. And to Thomas Waller, of Conduit Street West, in the county of Middlesex, Gentleman, for the invention of "Improvements in breech loading fire-arms."—A communication to him from abroad by Christopher Tyler, Stephen Wood, Egerton Marcy, and John Wilkinson, all of New York in the United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 17th day of March, 1862.

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747. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "The application to the manufacture of paper pulps of a vegetable product not hitherto used for that purpose."—A communication from Frédéric Thierry Pitoy-Millot, a person resident at No. 12, Faubourg St. Pierre, Nancy (departement de la Meurthe), in France.

749. To James Banks, of No. 19, Salisbury Street, Adelphi, Electric Engineer, for the invention of "Improvements in electro-magnetic telegraph printing apparatus or marking instruments, and the instruments or apparatus to be used in connection therewith."

750. To Henry Bailly, of 5, Salter's Hall Court, Cannon Street, E. C., in the city of London Merchant, for the invention of "Improvements in the manufacture of paper from wood, and in apparatus used therein."—A communication to him from abroad by Ernest Autreux and Michel and Joseph Cotton, Brothers, Merchants, of La Rochelle, (département Lower Charente), in France.

751. To Thomas Dunn, of the Windsor Bridge Iron Works, Pendleton, near the city of Manchester, Engineer, for the invention of "Improvements in the construction of bridges, roofs, houses, and other structures."

753. To Charles Iles, of Birmingham, in the county of Warwick, for the invention of "Improvements in the manufacture of umbrellas and parasols."

755. To James Archibald Jaques, Chemist, and John Americus Fanshawe, Engineer, both of Tottenham, in the county of Middlesex, and Frank Jaques, of Droylesdon, in the county of Lancaster, Gentleman, for the invention of "Improvements in the construction of elastic surface rollers."

757. To James Wright, of 42, Bridge Street, Blackfriars, city of London, Engineer, and Henry Wheatcroft, of 27, Fore Street, city of London, Manufacturer, for the invention of "Improvements in apparatus or machinery for lasting and making boots and shoes."

759. To Frederick Warner, of 8, Crescent, Cripplegate, in the city of London, for the invention of "Improvements in cocks or taps."

761 And to John Turner Buck, of New North Road, in the county of Middlesex, Dressing Case Maker, for the invention of "Improvements in instruments and work cases known as 'Ladies' companions.'"

On their several petitions, recorded in the Office of the Commissioners on the 18*th day of March*, 1862.

765. To Robert Wilson, of Patricroft, near the city of Manchester, Engineer, for the invention of "Improvements in hydraulic presses, and in machinery or apparatus for raising or forcing fluids."

767. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in printing and painting upon glass and ceramic wares and upon metallic and mineral substances, also in the preparation of inks and colours for printing and painting."—A communication to him from abroad by Charles Raphaël Maréchal and Cyprien Marie Tessié du Motay, of Paris, France.

769. To Richard Archibald Brooman, of 166 Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in rotary engines."—A communication to him from abroad by Serkis Ballian, of Constantinople, Turkey.

771. To John Cumming, of Edinburgh, Artist, for the invention of "Improvements in the method of and apparatus for distributing and setting up type."

772. And to George Meek Todd, of No. 84, Hackney Road, in the county of Middlesex, for the invention of "Improvements in shuttle sewing machine, and the production of a new kind of stitch thereby."

On their several petitions, recorded in the Office of the Commissioners on the 19*th day of March*, 1862.

774. To John George Truscott Campbell, of No. 1, Hatcham Terrace, Old Kent Road, in the county of Surrey, Clerk, for the invention of "Certain improvements in ships' propellers."

778. And to Edward Field, of Buckingham Street, Adelphi, in the city of Westminster, and county of Middlesex, Consulting Engineer, for the invention of "Improvements in apparatus for regulating the flow of gaseous and other fluids."

On both their petitions, recorded in the Office of the Commissioners on the 20*th day of March*, 1862.

788. To James Humphrys, of Tower Hill, in the county of Middlesex, Engineer, for the invention of "Improvements in steam engines."

790. To William Phelps, Manager for Henry Carey, of Nottingham, Lace Manufacturer, and William Roe Lymbery, also of Nottingham, Lace Maker, for the invention of "An improved woven fabric, and improvements in machinery for manufacturing the same."

792. And to William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in sewing machines, which improvements are also partly applicable to other machinery for giving a rotating motion always in the same direction."—A communication to him from abroad by Mr. Charles Rhodes Goodwin, of 29, Boulevart St. Martin, Paris, Manufacturer.

On their several petitions, recorded in the Office of the Commissioners on the 21*st day of March*, 1862.

794. To Thomas Marsh, of West Bromwich, in the county of Stafford, Hame Manufacturer, for the invention of "An improvement or improvements in hames for horses and other draught animals."

796. To Evan Owen, of Bala, in the county of Merioneth, North Wales, Joiner, for the invention of "Certain improvements in the hydraulic engines known as 'Turbines.'"

798. To John Davis, of Kennington, in the county of Surrey, Band Master to the Civil Service Rifle Volunteers, for the invention of "Improvements in wind musical instruments."

800. To Frederick William Colls, of Deptford, in the county of Kent, and Peter Haden, of Hackney, in the county of Middlesex, for the invention of "Improvements in consuming smoke, and in the apparatus connected therewith."

802. To Josiah George Jennings, of Holland Street, Blackfriars Road, in the county of Surrey, for the invention of "Improvements in the manufacture of biscuits."

804. To Thomas Frederick Hale, of the city of Bristol, Brass Founder, for the invention of "Improvements in valves."

806. And to George Hartshorne the younger, and Daniel Grainger Ward, of Dudley, in the county of Worcester, Iron Merchants and Copartners, and William Woolley, of Tipton, in the county of Stafford, Boiler Maker, for the invention of "Improvements in punching or perforating metal plates or sheets, and in apparatus or machinery to be employed for that purpose."

On their several petitions, recorded in the Office of the Commissioners on the 22*nd day of March*, 1862.

810. To Thomas White, of Birmingham, in the county of Warwick, Managing Clerk, for the invention of "Improvements in the manufacture and ornamentation of nut crackers and lobster crackers."

On his petition, recorded in the Office of the Commissioners on the 24*th day of March*, 1862.

822. To Alfred Fryer, of Manchester, in the county of Lancaster, Sugar Refiner, for the invention of "Improvements in the manufacture of sugar, and

in separating liquids from sugar and other substances."

824. To THEOPHILE GUIBAL, of No. 43, Rue des Groseillers, Mons, in the kingdom of Belgium, Civil Engineer, for the invention of "Improvements in the construction of ventilators for the ventilation of mines and furnaces."

828. And to WILLIAM CLISSOLD, of Dudbridge Works, near Stroud, in the county of Gloucester, Machine Manufacturer, for the invention of "Improvements in carding engines."

On their several petitions, recorded in the Office of the Commissioners on the 25th day of March, 1862.

830. To LÉO DE LA PEYROUSE, of 13, Panton Square, in the county of Middlesex, Manufacturer, for the invention of "Improvements in the preservation of animal substances."

832. To JOHN WILSON, Hotpresser and Calenderer, in Glasgow, in the county of Lanark, for the invention of "Improvements in the apparatus used for and in the method of hot pressing or finishing plaids, shawls, handkerchiefs, and other woven fabrics."

834. To WILLIAM JOHN TAYLOR, of No. 5, Upper Church Street, King's Road, Chelsea, in the county of Middlesex, for the invention of "An improved method of colouring Portland cement for plain and ornamental plasterer's work on the walls of buildings and other erections."

836. To ROBERT BOBY, of Bury St. Edmunds, in the county of Suffolk, Agricultural Implement Maker, for the invention of "Improvements in hay-making machines."

838. To JOHN TAYLOR, Civil Engineer, and CHARLES HENRY MINCHIN, Accountant, both of the city of Manchester, in the county of Lancaster, for the invention of "A suspender or improved gallery for supporting the shades of gas or other lights."

840. And to ROBERT GRIFFITHS, of 69, Mornington Road, Regent's Park, Engineer, for the invention of "Improvements in weapons of warfare for naval purposes."

On their several petitions, recorded in the Office of the Commissioners on the 26th day of March, 1862.

844. To WILLIAM GREENWAY, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "Improvements in the manufacture of bolts for fastening doors, and for other like purposes."

846. To THOMAS GEORGE GREENSTREET, of 6, Penton Place, Kennington Road, in the county of Surrey, for the invention of "Improvements in window sashes."

848. To RICHARD EDWARDS, of Regent Street, Mile End, in the county of Middlesex, Emery Manufacturer, for the invention of "Improvements in machinery and apparatus for pulverizing, stamping, and washing mineral, animal, and vegetable substances."

850. To JAMES LOCK, of Nassington, in the county of Northampton, for the invention of "Improvements in apparatus for raising or elevating straw and crops on to stacks."

854. To ROBERT DE BARY, of Finsbury Square, in the county of Middlesex, Gentleman, for the invention of "Improvements in machinery for the manufacture of cigars."—A communication to him from abroad by Julius De Bary, of Offenbach, Hesse Darmstadt.

856. To WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for the invention of "Improvements in apparatus for extinguishing fire."—A communication to him from abroad by Gabriel Brasseur, of No. 15, Passage des Petites Ecuries, Paris, France

858. To JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in thrashing machines."—A communication to him from abroad by Auguste Bernard Albaret, of Paris, in the empire of France, Mechanician.

860. To GEORGE HENRY BIRKBECK, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for the invention of "Improvements in the means of producing imitation mosaics."—A communication to him from abroad by Charles Auguste Le Bourg, Statuary, of Paris, in the empire of France.

On their several petitions, recorded in the Office of the Commissioners on the 27th day of March, 1862.

Inventions protected for Six Months by the Deposit of Complete Specifications.

NOTICE is hereby given, that the petition of

847. FREDERICK TOLHAUSEN, C.E., and Patent Agent, of 17, Faubourg Montmartre, Paris, in the empire of France, praying for Letters Patent for the invention of "New or improved cigar-tubes or apparatus for holding and smoking cigars and cigarets,"—a communication to him from Joseph Charles Toussaint, a person resident at No. 17, Faubourg Montmartre aforesaid,—was deposited and recorded in the Office of the Commissioners on the 27th day of March, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Notice is hereby also given that the petition of

893. JOSEPH PAGE WOODBURY, of the city of Boston, in the county of Suffolk, in the commonwealth of Massachusetts, one of the United States of America, praying for Letters Patent for the invention of "An improvement in arming war vessels," was deposited and recorded in the Office of the Commissioners on the 31st day of March, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

NOTICE is hereby also given, that the petition of

910. MICHAEL HENRY, of 84, Fleet Street, in the city of London, Patent, praying for Letters Patent for the invention of "An improved furnace for treating iron ore,"—a communication to him from abroad by Joseph Alexandre Marcel Bonne, of Cluis, in the French empire,—was deposited and recorded in the Office of the Commissioners on the 1st day of April, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

4th April, 1862.

2505. John Chaplin Willsher, of Petches, in the parish of Finchingfield, in the county of Essex, Farmer, for an invention of "Improvements in the construction of combined thrashing and dressing machines."—Dated 7th October, 1861.

2510. William Simpson, of Calais, in the empire of France, Lace Manufacturer, for an invention of "Improvements in the manufacture of twist lace made in twist lace machines."—Dated 8th October, 1861.

2514. Robert William Sievier, of Guilford Street, Russell Square, in the county of Middlesex, Gentleman, for an invention of "Improvements in batteries for the purposes of war."—Dated 9th October, 1861.

2516. William Smith, of 21, King Street, West Smithfield, in the county of Middlesex, Gas Meter Manufacturer, for an invention of "Improvements in apparatus for measuring and regulating the pressure of gas."—Dated 9th October, 1861.

2521. Henry Bentinck Coathupe, of the Junior United Service Club, Saint James's, in the county of Middlesex, Esquire, and Frank Higgins Waltham, of 15, Palace Street, Haverstock Hill, in the said county, for an invention of "Improvements in obtaining or producing and applying embossed or raised and engraved or indented metal or other surfaces."—Dated 9th October, 1861.

2531. Charles Wilson Felt, of Salem, county of Essex and state of Massachusetts, one of the United States of America, for an invention of "An improved machine for setting, spacing, justifying, and distributing printers' type."—Dated 10th October, 1861.

2533. Louis Christoph, of Paris in the empire of France, William Hawksworth, of Linlithgow, North Britain, Steel Manufacturer, and Gustavus Palmer Harding, of Paris, Merchant, for an invention of "Improvements in the manufacture of cast-steel and other metal tubes, and in the machinery or apparatus employed therein, parts of which improvements are applicable to the manufacture of gun barrels and ordnance, and to the rifling of same."—Dated 10th October 1861.

2544. Numa Stram, of 12, Ashby Street, Northampton Square, in the county of Middlesex, for an invention of "Improvements in watches."—Dated 11th October, 1861.

2561. Benjamin Taylor, of Birmingham, in the county of Warwick, and Charles Edkins, of the same place, Manufacturers, for an invention of "Improvements in porte-robes or dress-suspenders, and also in apparatus for the suspension of curtains, draperies, and other articles."—Dated 14th October, 1861.

2562. Frederick Burnett Houghton, of 6, Clarendon Terrace, Kensington, in the county of Middlesex, for an invention of "Improvements in apparatus employed in reducing straw and other vegetable substances in the manufacture of pulp for making paper."—Dated 14th October, 1861.

2573. Francis Bryan Baker, of Sherwood Street, Nottingham, for an invention of "Improvements in dressing or stiffening lace and other fabrics."—Dated 16th October, 1861.

2574. Thomas Forster, of Sparrow Hall, Streatham, in the county of Surrey, India Rubber Manufacturer, for an invention of "Improvements in re-working waste vulcanised india-rubber."—Dated 16th October, 1861.

2584. William Welch, of 27, King Street, Southsea, Portsmouth, in the county of Hants, for an invention of "Improvements in marine screw propellers."—Dated 17th October, 1861.

2605. Hugh Macmeikan, of Stratford, in the county of Essex, for "Improvements in smelting copper, gold, and other ores."—A communication to him from abroad by Rowland Vounder Rodda, of Alberton, near Adelaide, South Australia.—Dated 18th October, 1861.

2623. Josiah Timmis Smith, of Barrow-in-Furness, in the county of Lancaster, Engineer, for an invention of "An improvement or improvements in collecting the inflammable gases evolved from blast furnaces."—Dated 21st October, 1861.

2700. George Mowbray Gilbert, of 1, Albany Terrace, Britannia Square, Worcester, for an invention of "Improvements in preparing blue colour, and in apparatus for applying such colour to water."—Dated 28th October, 1861.

2822. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improved apparatus for manufacturing and containing gaseous liquids."—A communication to him from abroad by Pierre Prudence Henri Couillard, of No. 45, Rue St. Sébastien, Paris, in the empire of France.—Dated 9th November, 1861.

2855. William Henry Balmain, of St. Helens, in the county of Lancaster, Manufacturing Chemist, and John Kean, of the same place, Manufacturing Chemist, for an invention of "Improvements in the manufacture of flowers of sulphur and roll and other forms of sulphur."—Dated 13th November, 1861.

2877. Edward Loomes, of Whittlesey, in the Isle of Ely, and county of Cambridge, Brick and Tile Manufacturer, for an invention of "Improved machinery for moulding bricks, tiles, and other like articles."—Dated 15th November, 1861.

3009. Thomas Ellis, of Swindon, in the county of Wilts, Engineer, for an invention of "Certain improvements in rails for permanent ways."—Dated 29th November, 1861.

3182. William Tate, of Horsley Hill, near South Shields, Durham, for an invention of "Improvements in armour, and in making and applying the same for protecting wood and iron ships of war and batteries."—Dated 19th December, 1861.

3202. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in machinery for attaching the soles of boots and shoes to the upper leathers."—A communication to him from abroad by Simon Smith Bucklin, a person resident

at Brooklin, Massachusetts, United States of America.—Dated 20th December, 1861.

3225. François Laurent and John Casthelaz, of No. 19, Rue Ste. Croix de la Bretonnerie, Paris, Chemists, for an invention of "Improvements in the manufacture of coloring matters."—Dated 24th December, 1861.

36. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Certain new and useful improvements in machinery for propelling water craft."—A communication to him from abroad by Edward Sabine Renwick, a person resident at 335, Broadway, New York, in the United States of America.—Dated 4th January, 1862.

127. Nathan Thompson, of 55, St. Paul's Road, Camden Town, in the county of Middlesex, for an invention of "Improvements in apparatus for stopping bottles."—Dated 17th January, 1862.

191. John Alison, of Brightlands, Reigate, in the county of Surrey, for an invention of "Improvements in apparatus for tilling land by steam power."—Dated 24th January, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

31st March, 1862.

832. Michael Coupland, of Haggerstone, in the county of Middlesex, Engineer, for an invention of "Improvements in furnaces."—Dated 2nd April, 1859.

845. David Blair White, of Newcastle-on-Tyne, M.D., for an invention of "Improvements in arranging ships' and other pumps."—Dated 4th April, 1859.

866. Alexander Chaplin, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in steam boilers." Dated 7th April, 1859.

1098. James Childs, of Windsor House, Putney, in the county of Surrey, for an invention of "Improvements in the manufacture of night light cases."—Dated 2nd May, 1859.

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

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PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March „
268	„ April to June „
291	„ July to September „
321	„ October to December „
345	A.D. 1854—January to March „
371	„ April to June „
399	„ July to September „
424	„ October to December „
451	A.D. 1855—January to March „
475	„ April to June „
505	„ July to September „
527	„ October to December „
553	A.D. 1856—January to March „
579	„ April to June „
605	„ July to September „
632	„ October to December „
660	A.D. 1857—January to March „
684	„ April to June „
712	„ July to September „
737	„ October to December „
761	A.D. 1858—January to March „
789	„ April to June „
815	„ July to September „
842	„ October to December „

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632	A.D. 1852—October to December inclusive
660	A.D. 1853—January to March „
684	„ April to June „
712	„ July to September „
737	„ October to December „
761	A.D. 1854—January to March „
789	„ April to June „
815	„ July to September „
842	„ October to December „

CATALOGUE of the LIBRARY of the GREAT SEAL PATENT OFFICE. Two vols. imp. 8vo. (Vol. I. Titles; Vol. II. Index.) Price 21*s.*

FOREIGN PATENTS.

BELGIUM.*

List of Patents of Invention Delivered on the 31st March, 1862.†

(*Communicated by the Belgian Government.*)

(For previous List, see No. 856 of this Journal.)

12,052. A. Couvreux, represented by H. Biebuyck, of Brussels, for an imported invention of "Journals with clasps."—Dated 21st January, 1862.—(French Patent, 6th January, 1862.)

12,263. M. J. Motte, of Marchienne-au-Pont, Fontaine l'Evêque, for "Manufacture of hard coke."—Dated 10th March, 1862.

12,264. A. Vander Rivière, of Brussels, for "Improvements in Parod's apparatus for mincing and cutting meat."—Dated 8th March, 1862.

12,265. H. De Lapparent, represented by O. Daillencourt, of Brussels, for an imported invention of "Processes for preserving wood, and especially timber and maritime works."—Dated 8th March, 1862.—(French Patent, 8th January, 1861.)

12,266. V. Corne and R. Balans, represented by O. Daillencourt, of Brussels, for an imported invention of "A kind of binding rope for carriages."—Dated 8th March, 1862.—(French Patent, 5th January, 1862.)

12,267. J. Haas, represented by O. Daillencourt, of Brussels, for an imported invention of "A kind of shades for caps and other head coverings."—Dated 8th March, 1862.—(French Patent, 3rd March, 1862.)

12,268. A. Galy-Cazalat, represented by H. Biebuyck, of Brussels, for "Improvements in the manufacture of refined pig iron, cast steel, and iron.—Dated 8th March, 1862.

12,269. A. Friedmann and F. E. D'Erlanger, represented by H. Biebuyck, of Brussels, a Patent of Improvement of "A system of fire-places for locomotive engines, moveable engines, &c., and metallurgical furnaces."—Dated 8th March, 1862.—(Original Patent, 6th November, 1861.)

12,270. E. J. Hankart and P. J. Jaumonet, of Liége, for "A system of steam-cylinders."—Dated 8th March, 1862.

12,271. E. F. Fraikin, of Liége, for "Improvements in apparatus for the manufacture of wooden brackets."—Dated 8th March, 1862.

12,272. Tilkin-Tasset, of Liége, for "Breech-loading fire arms."—Dated 10th March, 1862.

12,273. J. Hubens, of Liége, for "Closing ball lanterns."—Dated 10th March, 1862.

12,274. N. F. Boruko de Chodzko, and J. L. Lebeaux, represented by H. Biebuyck, of Brussels, for an imported invention of "A smoke-consuming apparatus."—Dated 10th March, 1862.—(French Patent, 20th July, 1858.)

12,275. H. A. Remière, represented by H. Guesnel, of St. Josse-ten-Noode, for "Collars of harnesses, with an impervious and elastic stuffing."—Dated 11th March, 1862.

12,276. J. B. G. Piret, represented by O. Daillencourt, of Brussels, for an imported invention of "Apparatus for lubricating journals liable to friction."—Dated 11th March, 1862.—(French Patent, 9th December, 1861.)

12,277. Rémond, represented by A. Calvet, of Brussels, for an imported invention of "A bit and complete bridle."—Dated 11th March, 1862.—(French Patent, 22nd October, 1861.)

12,278. S. Dahdah, represented by A. Calvet, of Brussels, for an imported invention of "A musket and shooting gun."—Dated 11th March, 1862.—(French Patent, 5th March, 1862.)

12,279. J. Friedlaender, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in apparatus for picking, scutching, and preparing flax, hemp, and other fibrous substances."—Dated 11th March, 1862.—(English Patent, 20th February, 1862.)

12,280. J. C. Garnier, represented by H. Biebuyck, of Brussels, for "A self-acting controlling apparatus with a closed vessel, bells, and steady level."—Dated 11th March, 1862.—(French Patent, 11th November, 1861.)

12,281. M. Nolden, represented by H. Biebuyck, of Brussels, for "A machine for hulling corn."—Dated 11th March, 1862.

12,282. A. Leclerq, of Olne-Verviers, for "A machine for washing flax, cotton, &c."—Dated 11th March, 1862.

12,283. J. Maris, of Brussels, for an imported invention of "A lamp for burning schist oil." Dated 12th March, 1862.—(French Patent, 8th February, 1862.)

12,284. J. H. Koosen, represented by A. Crooy, of Brussels, for an imported invention of "An electric chronometer with a centrifugal regulator."—Dated 12th March, 1862.—(French Patent, 7th March, 1862.)

12,285. F. Valée, of Brussels, for "A machine for balling thread."—Dated 11th March, 1862.

12,286. P. J. Gouteaux, of Gilly, a Patent of Improvement for "A safety break, with a whim-protector and bells, applicable to machines for extracting ores."—Dated 12th March, 1862.—(Original Patent, 24th May, 1848.)

12,287. H. Léonard, of Marchienne-au-Pont, Fontaine l'Evêque, for "A lubricating cup."—Dated 13th March, 1862.

12,288. P. Gondolo, represented by O. Daillencourt, of Brussels, for an imported invention of "A mode of heating and arrangements in kitchen ranges."—Dated 13th March, 1862.—(French Patent, 25th March, 1861.)

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

12,289. C. Noël, represented by O. Daillencourt, of Brussels, for an imported invention of "A mechanical means of improving the memory by staked out text."— Dated 13th March, 1862.—(French Patent, 5th March, 1862.)

12,290. L. J. Château, represented by O. Daillencourt, of Brussels, a Patent of Improvement for "A shade with convergent reflection."—Dated 13th March, 1862.—(Original Patent, 12th February, 1862.)

12,291. H. Attwood, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in cleaning and feeding steam boilers."—Dated 13th March, 1862.—(French Patent, 10th March, 1862.)

12,292. Chennevière, represented by H. Biebuyck, of Brussels, for an imported invention of "A process for reproducing applications of lace, embroideries, designs, &c., on vegetable, mineral, and animal substances."—Dated 13th March, 1862.—(Philippot, Ollivier, and Lefeuvre's French Patent, 14th December, 1860.)

12,293. A. G. Morvan, represented by H. Biebuyck, of Brussels for an imported invention of "A photographic process for reversing the tracing of maps, plans, and designs."—Dated 13th March, 1862.—(French Patent, 31st January, 1862.)

12,294. P. Smolders, of Borgerhout, for "A kind of hood for carriages."—Dated 14th March, 1862.

12,295. H. Schotte, of Thouront, for "Improvements in weighing machines."—Dated 15th March, 1862.

12,296. J. F. Valcke-Desmet, of Petegem, Ghent, for "An economical filter for extracting and purifying starch."—Dated 13th March, 1862.

12,297. J. Broux, of Evregnies-Templeuve, for "A mode of applying elastic tissues to boots."—Dated 17th March, 1862.

12,298. L. Cailloux, of Liége, for "A system of escapement, applicable to all kinds of machines."—Dated 12th March, 1862.

12,299. M. Kips, of Liége, for "A hand force and lift pump."—Dated 15th March, 1862.

12,300. J. F. Delsa, of Liége, for "Locks for doors."—Dated 17th March, 1862.

12,301. A. Fonck, of Liége, for "A piston manometer."—Dated 10th March, 1862.

12,302. S. Gérard, of Liége, for an imported invention of "Improvements in Mueseler's lamps."—Dated 17th March, 1862.—(Original Patent, 10th October, 1860.)

12,303. O. Kérautret and jun., represented by L. De Meckenheim, of Ixelles, for an imported invention of "A process for superseding stones and bricks in building."—Dated 15th March, 1862.—(French Patent, 16th September, 1861.)

12,304. A. Guinard, represented by L. De Meckenheim, of Ixelles, for an imported invention of "A machine for the manufacture of nails of horse-shoes."—Dated 15th March, 1862.—(French Patent, 22nd October, 1861.)

12,305. J. M. Yserman, represented by H. Biebuyck, of Brussels, for "A fire signal."—Dated 15th March, 1862.

12,306. E. J. Hoorickx, of Brussels, a Patent of Improvement for "Manufacture of relief lace with coloured designs."—Dated 15th March, 1862.—(Original Patent, 18th January, 1862.)

12,307. F. Ladry, of Brussels, for "Concave wads for smooth guns and spherical balls."—Dated 17th March, 1862.

12,308. E. Autreux and Cotton, Brothers, represented by A. Calvet, of Brussels, for an imported invention of "A circular rasp for cutting wood in the manufacture of paper pulp."—Dated 17th March, 1862.—(French Patent, 25th March, 1861.)

12,309. A. J. Nadaud, represented by A. Calvet, of Brussels, for an imported invention of "Red, violet, blue, or green ink, with a base of fuchsine and aniline."—Dated 17th March, 1862.—(French Patent, 12th February, 1862.)

12,310. P. Maillé, of Brussels, for an imported invention of "A steam horse gin."—Dated 17th March, 1862.—(French Patent, 16th May, 1861.)

12,311. J. Dothée, represented by D. De Vos-Verraert, of Brussels, for an imported invention of "Improvements in dyeing tresses and hats of horse-hair, and of all kinds of vegetable substances."—Dated 17th March, 1862.—(French Patent, 21st February, 1862.)

12,312. Marrel, Brothers, represented by D. De Vos-Verraert, for "A special shape of rolled iron with grooves."—Dated 17th March, 1862.

12,313. L. P. Barré, represented by D. De Vos-Verraert, for "Improvements in the tubular arrangement of steam engines."—Dated 17th March, 1862.

12,314. A. Tavernier, represented by D. De Vos-Verraert, a Patent of Improvement for "A steel petticoat."—Dated 17th March, 1862.—(Original Patent, 16th October, 1857.)

12,315. G. Jacquin, of Mons, for "A lamp for burning schist oil."—Dated 15th March, 1862.

12,316. G. Minsier, of Jauche-Huy, for "A kitchen stove with a revolving bottom for simultaneously cooking dishes and baking bread."—Dated 18th March, 1862.

12,317. O. Tiberghien, represented by A. Tardieu, of St. Josse-ten-Noode, for "A stop apparatus applied to doubling machines in cases of rupture of thread."—Dated 18th March, 1862.

12,318. A. B. Bérard, represented by P. Bouquié-Lefebvre, of St. Josse-ten-Noode, for "A direct mode of converting pig-iron into cast steel or iron."—Dated 18th March, 1862.

12,319. L. A. A. D'Herbes, represented by P. Bals, of Brussels, for "A peculiar mode of preparing iron for nails of horse-shoes and machine for manufacturing the same by a cold process."—Dated 18th March, 1862.

12,320. Ch. Rey, represented by Alb. Allard, of Brussels, for an imported invention of "A machine for spreading the leaves of tobacco and other plants."—Dated 18th March, 1862.—(French Patent, 9th December, 1861.)

12,321. S. V. Bonneterre, S. V. Echart, and J. F. Monti, represented by T. Fafchamps, of Brussels, for "An apparatus for regulating the pressure of steam and combustion in steam generators."—Dated 18th March, 1862.

12,322. J. E, H. Jolley, of Ixelles, a Patent of Improvement for "An apparatus for preserving food."—Dated 19th March, 1862.—(Original Patent, 11th May, 1860.

12,323. S. S. White, represented by O. Daillencourt, of Brussels, a Patent of Improvement for "A system of artificial teeth."—Dated 19th March, 1862.—(Original Patent, 17th December, 1861.)

12,324. M. Javelle, represented by F. Clavareau, of Brussels, a Patent of Improvement for "Revolving pistols or guns, and manufacture of cartridges for the same."—Dated 19th March, 1862. —(Original Patent, 19th March, 1860.)

12,325. H. Corr, represented by E. De T'Serclaes, of Schaerbeek, for an imported invention of "A self-acting apparatus for injecting steam into fireplaces, kilns, and furnaces."—Dated 19th March, 1862.—(French Patent, 4th March, 1862.)

12,326. B. Standen, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of manure."—Dated 19th March, 1862.—(English Patent, 4th March, 1862.)

12,327. J. C. Coombe and Th. Cobley, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of fluo-silicates with metallic and non-metallic bases." —Dated 19th March, 1862. — (English Patent, 8th July, 1862.)

12,328. Th. Cobley, represented by H. Biebuyck, of Brussels, for an imported invention of "Treatment of silicates, with metallic and non-metallic bases, for the purpose of simultaneously obtaining those bases and hydrofluo-silicic acid."—Dated 19th March, 1862.—(French Patent, 9th July, 1861.)

12,329. J. C. Coombe, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in indurating and preserving statuary stone, bricks, tiles, and similar substances." — Dated 19th March, 1862.—(English Patent, 14th March, 1861.)

12,330. H. Melchior, of Gilly-Charleroi, for "Casting cylinders of rolling-mills."—Dated 20th March, 1862.

12,331. J. Rigaux Naye, of Châtelot-Charleroi, for "Hollow and solid bricks for even roads."— Dated 22nd March, 1862.

12,332. J. Bredenhorst, of Antwerp, for "Obtaining the sap of maritime pine trees."—Dated 22nd March, 1862.

12,333. L. Vander Elst and Co., of Braine-le-Comte, for "An apparatus for insulating weighing machines of railways."—Dated 24th March, 1862.

12,334. C. M. Jessié du Motay and C. R. Maréchal, represented by H. Biebuyck, of Brussels, for an imported invention of "A process for obtaining impressions, or paintings on glass, crystal, porcelain, &c." — Dated 21st March, 1862. — (French Patent, 19th November, 1861.)

12,335. C. M. Roullier, represented by H. Biebuyck, of Brussels, for an imported invention of "Flat jointed cables."—Dated 21st March, 1862. —(French Patent, 2nd December, 1861.)

12,336. S. Ballian, represented by H. Biebuyck, of Brussels, for an imported invention of "A rotary steam engine." — Dated 21st March, 1862. — (French Patent, 4th December, 1861.)

12,337. J. G. Reynolds, represented by H. Biebuyck, of Brussels, for an imported invention of "A process for ornamenting smoking pipes and other ceramic articles."—Dated 21st March, 1862. —(French Patent, 17th March, 1862.)

12,338. J. G. Reynolds, represented by H. Biebuyck, of Brussels, for an imported invention of "A tool for boring the bowls of smoking pipes." —Dated 21st March, 1862.—(French Patent, 17th March, 1862.)

12,339. A. G. Morvan, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "A photographic process for reversing the tracing of maps, plans, and designs."—Dated 21st March, 1862.— (Original Patent, 13th March, 1862.)

12,340. L. Christophe, Hawksworth, and G. P. Harding, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "Manufacture of metallic pipes."—Dated 21st March, 1862. —(Original Patent, 6th November, 1861.)

12,341. T. Morris, R. Weare, and E. H. C. Monckton, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in batteries for generating currents of electricity."— Dated 21st March, 1862.—(English Patent, 14th September, 1861.)

12,342. Ch. Baumann, represented by H. Quitmann, of Brussels, for "Buttons"—Dated 22nd March, 1862.

12,343. Howendahl, represenied by H. Quitmann, of Brussels for "A parachute for miners' cages." —Dated 22nd March, 1862.

12,344. T. Ronsmans, of Brussels, for "An apparatus for chimneys to prevent the back flow of smoke."—Dated 22nd March, 1862.

12,345. T. Ronsmans, of Brussels, for "A smoke consuming apparatus, applicable to chimneys."— Dated 22nd March, 1862.

12,346. S. Whitaker and R. A. Jones, represented by R. S. Kirkpatrick, of Ixelles, for an imported invention of "Improvements in the means of working railway signals."—Dated 22nd March, 1862. (English Patent, 20th August, 1861.)

12,347, E. Mouvet of Bas-Oha, for "Manufacture of refractory articles."—Dated 22nd March, 1862.

12,348. J. B. Glineur, of Villerst-Boussu, for "A churn."—Dated 24th March, 1862.

12,349. D. Robbe, of Hoeglede, for "A rocking balance."—Dated 24th March, 1862.

12,350. W. and B. Douglas, represented by E. Antonis, sen., of Antwerp, for an imported invention of "A portable pump."—Dated 25th March, 1862.—(American Patent, 6th November, 1860.)

12,351. M. Rae, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in lamps."—Dated 24th March, 1862.— (English Patent, 16th September, 1861.)

12,352. J. R. Knox, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of paper."—Dated 24th March, 1862.—(French Patent, 14th March, 1862.)

12,353. J. B. Mauvy, of Schaerbeek, for "Improvements in the construction of crushing mills (according to the Bavarian system)."—Dated 24th March, 1862.

12,354. F. Million, represented by A. Crooy, of Brussels, a Patent of Improvement for "Metallic packings of pistons, rods, &c."—Dated 24th March 1862.—(Original Patent, 14th November, 1861.)

12,355. H. C. Jennings, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in the treatment of skins."—Dated 24th March 1862.—(English Patent, 14th September, 1861.)

12,356. J. J. Nazé, of Spy-Namur, for "A thrashing machine."—Dated 24th March 1862.

KINGDOM OF ITALY.

List of Patents, Certificates of Addition, and Prolongation, and Disclaimers, delivered during the Fourth Quarter of 1861.

(*Communicated by the Italian Government.*)

(For preceding List, see No. 834 of this Journal.)

1. Patents delivered.

1. Giuseppe and Luigi Martinotti, of Turin, represented by Gaetano Capuccio, of Turin, for "Moveable bed-room furniture to be packed up in two cases."—3 years.—Dated 28th September, 1861.

2. Salvatore Vinci, of Paris, represented by Ed. Cretté, Turin, for "Manufacture of animal charcoal."—3 years.—Dated 28th September, 1861.

3. Giacomo Carlo Giuseppe Lhote, of Paris, represented by G. Capuccio, Turin, for "A portable apparatus for obtaining Seltzer water and other gaseous beverages."—6 years.—Dated 3rd October, 1861.

4. Hebert Newton Penrice, of Vitton House, Norfolk, represented by G. Capuccio, Turin, for "Improvements in machines for tunnelling and driving galleries through rock and other strata."—13 years.—Dated 3rd October, 1861.

5. Eugenio Barsanti, Felice Matteucci, and Gio. Batt. Babacci, of Florence, represented by G. Capuccio, Turin, for "Improvements in preventing explosions of atmospheric air mixed with inflammable gas or of detonating fluids in general that are employed for obtaining motive-power."—15 years.—Dated 9th October, 1861.

6. Natale Ceccarelli and Giuseppe Montano, of Genoa, for "Manufacture of a new inalterable yellow colouring substance from the root of saffron treated by means of milk, being a substitute for saffron in colouring vermicelli, cheese, butter, fabrics, paper, and other industrial articles."—1 year.—Dated 16th July, 1861.

7. Giuseppe Giordano, of Salerno, represented by G. Capuccio, Turin, for "Extracting fecula and alcohol from the plant 'Pancratium marittimum.'"—15 years.—Dated 9th October, 1861.

8. Giuseppe Guioni, of Milan, for "An apparatus for shaking the straw in thrashing machines."—3 years.—Dated 2nd October, 1861.

9. Giulio Fornara, of Milan, for "A new system of impregnating wood for preservation."—1 year.—Dated 14th October, 1861.

10. John Harcourt Brown, of Romsey, represented by G. Capuccio, Turin, for "Improvements in apparatus for lubricating the barrels of fire-arms and ordnance."—13 years.—Dated 5th October, 1861.—(English Patent, 26th April, 1861.)

11. Matteo Coppo, of Paris, represented by Luigi Bassini, of Pavia, for "Improvements in the manufacture of felt hats and other felt articles."—15 years.—Dated 14th September, 1861.

12. Paolo Fléchet, of Paris, represented by G. Capuccio, Turin, for "A solary chronometer indicating mean time, applicable to all parts of the world."—6 years.—Dated 3rd October, 1861.

13. Giovanni Sickels, of London, for "Improvements in machines for sewing leather and other similar substances."—6 years.—Dated 3rd October, 1861.

14. Pietro Gavazzi, of Milan, represented by Anatolio Mathieu, Turin, for "Applying steam as a motive-power to the scientific principle of aeolipiles."—6 years.—Dated 28th October, 1861.

15. Nicoud, jun., of Vienne, France, for "Watering tuns applicable to the conveyance of water for extinguishing fires, together with a pump for filling the same."—3 years.—Dated 25th October, 1861.

16. Carlo Fossa, of Genoa, for "A screw propeller."—4 years.—Dated 26th October, 1861.

17. Gio. Antonio Ratignez, of Lyons, represented by Achille Cortese, Turin, for "Manufacture of string and ropes."—10 years.—Dated 9th October, 1861.

18. Giuliano Villanis, of Turin, for "Economical chimneys."—2 years.—Dated 24th October, 1861.

19. Giacomo Manuelli, of Reggio, for "Bitumen paper for roofing."—1 year.—Dated 5th November, 1861.

20. Gio. Batt. Martin, of Paris, represented by G. Capuccio, Turin, for "A magical cup and ball."—2 years.—Dated 13th November, 1861.

21. Gio. Batt. Vitali, of Milan, repesented by G. Capuccio, Turin, for "A new system of obtaining inscriptions, numbers, emblems, &c., of porcelain, with other baked clay."—1 year.—Dated 6th November, 1861.

22. Claudio Falcot, Carlo Klein, and Claudio Berthelon, of Lyons, represented by Gustavo Pelliza, Turin, for "Applying iron with mouldings to the framework of weighing machines."—3 years.—Dated 15th November, 1861.

23. Giovanni Moro, of Arona, for "A machine for conglomerating peat."—1 year.—Dated 26th June, 1861.

24. Edward David Hughes, of New York, domiciled with Mr. Moris, Place Château, Turin, for "An electric printing telegraph."—5 years.—Dated 7th November, 1861.

25. Alcidalis Damoiseau, of Alençon, represented by G. Capuccio, Turin, for "An apparatus for drawing blood or other liquids from the human body or animals."—1 year.—Dated 13th November, 1861.

26. Marino Falconi, Turin, for "An absorbing vegeto-mineral antimephitic and antiseptic powd for obviating the danger of burying persons that are only apparently dead, and preventing the deleterous liquids or gaseous emanations in case of real death."—7 years.—Dated 13th November, 1861.

27. Claudio Falcot, Carlo Klein, and Claudio Berthelon, of Lyons, represented by Gustavo Pelizza, Turin, for "New arrangements in scales

for shops."—3 years.—Dated 15th November 1861.

28. Ferdinando Papanti, of Livorno, for "A new economical motor."—15 years.—Dated 21st November, 1861.

29. William Harris, of Merton, represented by Giovanni Pavia, Turin, for "A new mode of tanning hides."—4 years.—Dated 21st November, 1861.

30. Federico Ransone, of Ipswich, represented by G. Capuceio, Turin, for "Improvements in the manufaeture of artifieial stone, cement, and plaster, and in the treatment of wood to be preserved."—13 years.—Dated 23rd November, 1861.—(English Patent, 9th April, 1861.)

31. Claudio Brison, of Châlon-sur-Saône, and Antonio Chavanne, of Paris, represented by G. Capuceio, Turin, for "A new arrangement in furnaees for various manufaeturing and industrial purposes."—1 year.—Dated 23rd November, 1861.

32. Alessandro Friedmany, of Pesth, and Emilio Erlanger, of Paris, represented by G. Capueeio, Turin, for "A system of fire-plaees applieable to generators of fixed and moveable steam-engines."—6 years.—Dated 23rd November, 1861.

33. Napoleone Gaillard, of Paris, represented by G. Capuecio, Turin, for "Manufaeture of gutta-pereha foot eoverings."—5 years — Dated 23rd November, 1861.

34. Gio. Batt. Brunetti, of Verzuolo, domieiled with Giuseppe Falehero, Turin, for "A new system of kilns for calcining limestone."—10 years.—Dated 4th October, 1861.

35. Giulio Fornara, of Milan, for "Fixed almanaeks for weekly, monthly, and yearly advertisements."—1 year.—Dated 15th Oetober, 1861.

36. Giuseppe Grassi and Graziano Tubi, Milan, represented by Luigi Bassini, Pavia, for "Applying the screw to locomotive engines or common tenders for aseending gradients on railways."—6 years.—Dated 26th November, 1861.

37. Ernesto Tourangin, of Gastaeo, Spain, represented by G. Capuccio, Turin, for "A new process for manufaeturing iron by previously reducing the ores."—6 years.—Dated 10th December, 1861.

38. Francesco Marsengo, of Turin, for "A regulating movement for all parts of paper maehines."—6 years.—Dated 17th December, 1861.

39. Augusto Halinbourg, of Paris, represented by Ed. Cretté, Turin, for "Improvements in the composition of the igniting substanee of matches."—3 years.—Dated 14th Deeember, 1861.

40. A. Muller and Co., of Paris, represented by G. Capuecio, Turin, for "Treatment of zinc ores."—6 years.—Dated 17th December, 1861.

41. Antonio Delpiano, of Vercelli, for "A new system of eoverings."—9 years.—Dated 19th December, 1861.

42. Giorgio Edoardo Donisthorpe, of Leeds, represented by G. Capuceio, Turin, for "Improvements in sizing, drying, and warping thread for weaving."—13 years.—Dated 10th December, 1861.—(English Patent, 20th May, 1861.)

43. Francesco Zaverio Gentil, of Rome, represented by G. Capuecio, Turin, for "Treatment of asphodele plants with the view of obtaining the greatest amount of acohol therefrom, and improving its flavour."—6 years.—Dated 10th December, 1861.

44. Luigi Jeofilo Riot, of Paris, represented by G. Capuccio, Turin, for "A system and means of obtaining a new kind of soap without waste."—6 years.—Dated 7th Deeember, 1861.

45. Vittorio Leté, of Laon, France, represented by G. Capueeio, Turin, for "Manufaeture of gilt and silvered sparkling wines."—1 year.—Dated 13th November, 1861.

46. Luigi Arnier, of Marseilles, for "Improvements in generators and steam engines."—6 years.—Dated 17th December, 1861.

2.—Certificates of Addition.

1. Pietro Chiapasso and Vittorio Tachini, of Bagnasco, represented by Eugenio Devenuto, Turin, for "A new mechanism applicable to flour mills with one or several mill-stones, and worked by hand, horse, or steam power."—Dated 8th October, 1861.
2. Ottavio Coletti, of Turin, for "A new system of water buckets for locomotion."—Dated 12th Oetober, 1861.
3. Luigi and Paolo Orlando, Brothers, of S. Pier d'Arena, represented by G. Capuceio, Turin, for "Manufacture of cylindrical oval shells of 21 and 16 centimetres for 80 and 40-pounders."—Dated 12th Oetober, 1861.
4. Giuseppe Antonini, of Borgosesia, for "A new system of loeomotion on railways with large gradients, applicable especially to great mountain chains,"—Dated 5th November, 1861.
5. Desiré Martin and Prospero Verdat de Trembley, of Rouen, represented by G. Capueeio, Turin, for "A pneumatie break."—Dated 13th November, 1861.
6. Giorgio Martin, of Paris, represented by G. Capuceio, Turin, for "Improvements in the construetion of bridges for railways, roads, &e."—Dated 13th November, 1661.
7. Pietro Leone Barré, of Chailloux, represented by Achille Cortese, Turin, for "Improvements in tubular motors of steam engines."—Dated 27th November, 1861.
8. Carlo Pognaire, of Marseilles, represented by G. Capuecio, Turin, for "Improvements in fixing and mounting telegraphic wires."—Dated 10th December, 1861.

3.—Prolonged Patents.

1. Luigi Massara, of Turin, for "Extracting and purifying tallow without smell."—2 years.—Dated 28th September, 1861.
2. Giuseppe Pinet, of Abilly, represented by G. Capuceio, Turin, for "A horse-gin with a central eolumn."—8 years.—Dated 17th December, 1861.
3. Charles Rhodes Godwin, of Paris, for "Improvements in sewing machines."—4 years.—Dated 17th December, 1861.

4.—Disclaimer.

1. Fortunato Telesio, of Genoa, for "A rotary cork machine.

COLONIAL PATENT LAW.

NEW ZEALAND.

ANNO VICESIMO QUARTO

VICTORIÆ REGINÆ.

No. 14.

ANALYSIS.

Title.
Preamble.
1. Short Title.
2. Mode of application for Letters Patent.
3. Inventor to deliver description or specification of his invention or improvement, &c., in duplicate.
4. Principle of machine, &c., to be explained.
5. Drawings and written references in case of drawings and specimens of ingredients, &c., for purpose of experiment, to be delivered.
6. Duplicate drawings, whenever case admits, to be furnished; one to be deposited in Colonial Secretary's Office and the other annexed to Patent.
7. Notice of application to be published in Gazette.
8. Governor may refer objections to persons appointed, who shall report.
9. Costs of inquiry to be given.
10. If no objection Letters Patent may be issued.
11. Letters Patent and specifications, &c., to be enrolled.
12. Holder of Letters Patent issued under this Act entitled to same privileges in New Zealand as Patentee under Great Seal entitled to in England.
13. More than twelve persons may be interested in Letters Patent.
14. Assignment of a Patent and record thereof.
15. Injunction may be granted.
16. Letters Patent may be repealed by *scire facias*.
17. Specification may be corrected.
18. Disclaimer may be entered.
19. Punishment for false entries or false affirmation.
20. Holder or assignee of Patent obtained in other countries may obtain Letters of registration.
21. If in any action or suit a verdict or decree shall pass for the Patentee the judge may grant a certificate, which shall entitle the Patentee upon a verdict in his favour to receive treble costs.
22. Plaintiff in any action shall file with declaration notice of objections on which he means to rely at trial.
Judge at chambers on summons may allow other objections at his discretion.
23. Costs of action.
24. Penalty for counterfeiting, &c.
25. Interpretation clause.
26. Royal prerogative saved.

AN ACT TO REGULATE GRANTS OF PATENTS FOR INVENTIONS. [27th October, 1860.]

Whereas it is expedient to make provision for granting Patents for inventions in the Colony: Be it enacted by the General Assembly of New Zealand in Parliament assembled, and by authority thereof, as follows:

I. The short title of this Act shall be the "Patents Act, 1860."

II. Any person being the originator or discoverer of any new invention or improvement for which no Patent, or instrument in the nature of Letters Patent, has been issued or granted in New Zealand or any other country, and being desirous of obtaining Letters Patent under this Act, shall deposit with the colonial treasurer the sum of ten pounds, and shall leave at the office or in the custody of such person as the Governor may from time to time or for any particular case appoint a petition addressed to the Governor, stating clearly and succinctly the object to be attained by his invention or discovery, and praying that Letters Patent may be granted to him for the exclusive use thereof in the Colony.

III. The inventor shall deliver a written description or Specification in duplicate of his invention or improvement, and of the manner and process of compounding the same, in such full, clear, and exact terms as to distinguish the same from all other things before known, and to enable any person skilled in the art of science of which it is a branch or with which it is most nearly connected to make, compound, and use the same.

IV. In the case of any machine he shall fully explain the principle and the several modes in which he has contemplated the application of that principle or character by which it may be distinguished from other inventions.

V. He shall accompany the whole with drawings and written references made in duplicate, where the nature of the case admits of drawings, or with specimens of the ingredients or of the composition of matter, sufficient in quantity for the purpose of experiment.

VI. The applicant for a Patent shall furnish duplicate drawings wherever the case admits of drawings, one of which shall be deposited in the office of the colonial secretary or other officer appointed in that behalf, and the other shall be annexed to the Patent and considered a part of the Specification thereof, and a copy of the Specification shall be in all cases annexed to the Patent.

VII. Notice of the said application shall be inserted in the Government Gazette, and in one newspaper published in the principal town of each province of the Colony, and requiring any person who may wish to prefer any objection to the granting of such Letters Patent to send within four months of the said publication, to the office or address of such person so appointed as aforesaid, a statement in writing setting forth the grounds of such objection, subscribed with his proper name and address.

VIII. It shall be lawful for the Governor, upon receipt within the time aforesaid of such objection, and on the deposit by the opponent of the sum of ten pounds, to refer the consideration thereof to one or more competent person or persons to be appointed by him, and also to direct the applicant for such Letters Patent, and the opponent thereof, to attend before such person or persons so appointed, who shall investigate the said matter, and shall be at liberty to call to his or their aid such witnesses as he or they may think fit, and to cause to be paid to such witnesses by the applicant or opponent such remuneration as he or they may direct; and such person or persons so appointed shall report to the Governor whether in his or their opinion such Letters Patent should be issued; and if any objection shall be sustained, the Specification, drawings, and models shall be returned to the applicant; and the balance of ten pounds after payment of such costs and expenses as may be awarded by the said investigator or investigators shall be returned to the applicant or opponent respectively.

IX. It shall be lawful for such investigator or investigators, if he or they see fit, by certificate under his or their hand, to determine the amount of the costs of any hearing or inquiry upon such objection, and to order by and to whom such costs shall be paid; and if any such costs so ordered to be paid be

not paid within seven days after service of such order, either personally or upon his agent, or by leaving the same at his last usual place of abode, every such order may be made a rule of the Supreme Court.

X. In case no objection shall be made within the time aforesaid to the grant of the said Letters Patent, or in case such person or persons so appointed shall report that such Letters Patent should be granted, the Governor may grant such Letters Patent, and such Specification, drawings, and other things so sent as aforesaid shall be deposited with the Colonial Secretary, or other officer appointed in that behalf.

XI. The Colonial Secretary shall cause the said Letters Patent and the said Specification and other things to be kept in his office, and shall also cause a book to be kept in his office containing an index to all such Letters Patent which may be issued or assigned as hereinafter mentioned, the object to be attained by the invention to be protected thereby, the date thereof, the name of the person to whom the same is issued or assigned, and such description of the enrolment thereof as may be necessary to facilitate reference. And all persons whosoever may have access to the said book, Letters Patent, and other things, and may inspect the same, and may have copies thereof or of such parts thereof as they may require, certified by the Colonial Secretary, upon payment of reasonable expenses of making the same; and such certified copies or extracts shall be received in evidence in all courts or proceedings whatsoever.

XII. Any person to whom the Governor shall, according to the provisions herein contained, grant Letters Patent, shall have within the Colony, for a term of fourteen years next after the granting of such Letters Patent, the exclusive enjoyment and advantage in the Colony of such invention or improvement, and such and the same protection, and such and the same remedies, at law and in equity, against any person in the Colony infringing the said Letters Patent, and generally such and the same rights, powers, and privileges throughout the Colony with respect to the invention for which such Letters Patent shall be granted, as any person to whom Letters Patent for a new invention have been granted under the Great Seal of England has, by the law of England, in and throughout the realm of England, save so far as such protection, remedies, rights, powers and privileges, may be inconsistent with the provisions of this Act: Provided that the provisions contained in an Act of the United Parliament of Great Britain and Ireland, passed in the session of the fifth and sixth years of the reign of His late Majesty King William the Fourth, intituled "An Act to amend the Law touching Letters Patent for Inventions," and the several provisions contained in an Act of the United Parliament of Great Britain and Ireland, passed in the session of the fifteenth and sixteenth years of the reign of Her present Majesty, intituled "An Act for amending the law for granting Patents for Inventions," shall not be deemed applicable to the Colony of New Zealand.

XIII. It shall be lawful for a larger number than twelve persons to have a legal and beneficial interest in any Letters Patent issued under the provisions of this Act.

XIV. Every Patent granted under this Act shall be assignable in law, either as to the whole interest or any undivided part thereof, by any instrument in writing, a memorial of which assignment, and also every grant and conveyance and license of the exclusive right under any Patent to make and use, and to grant to others to make and use the thing patented within the Colony, shall be recorded in the office of the Colonial Secretary within six months from the execution thereof, upon payment by the assignee or grantee to the Colonial Treasurer of the sum of ten shillings.

XV. In any action in the Supreme Court for the infringement of any Letters Patent granted under the provisions of this Act, it shall be lawful for the Court, as well in its common law as its equity jurisdiction, or if the Court be not sitting, then for a Judge of such Court, on the application of the plaintiff or defendant respectively, to make such order for an injunction, inspection, or account, and to give such direction respecting such action, injunction, inspection, and account, and the proceedings therein respectively, as to such Court or Judge shall seem fit.

XVI. Any Letters Patent granted by virtue of this Act shall be liable to be repealed by writ of *scire facias*, for the same causes and in the same manner as any grants of the Crown are liable to be repealed.

XVII. Whenever any Patent granted under the authority of this Act shall be inoperative or invalid by reason of a defective or insufficient description or Specification, or by reason of the Patentee claiming as his own invention more than he had or shall have a right to claim as new, if the error has or shall have arisen by inadvertency, accident, or mistake, and without any fraudulent or deceptive intention, it shall be lawful for the Governor, upon the surrender of such Patent, and the payment to the Colonial Treasurer of the sum of ten pounds, to cause a new Patent to be issued to the said inventor for the same invention for the residue of the period then unexpired for which the original Patent was granted in accordance with the Patentee's corrected description and Specification; and in case of his death, or any assignment by him made of the original Patent, a similar right shall vest in his executors, administrators, or assigns; and the Patent so re-issued, together with the corrected description and specification, shall have the same effect and operation in law on the trial of all actions commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form before the issuing out of the original Patent. And whenever the original Patentee, or his assignee, shall be desirous of adding the description and specification of any new improvement of the original invention or discovery which shall have been originated or discovered by him subsequent to the date of his Patent, he may (like proceedings being had in all respects as in the case of original application, and on the deposit of ten pounds) to be accounted for in manner herein-before provided, have the same annexed to the original description and Specification, and the Colonial Secretary shall certify on the margin of such annexed description and Specification the time of its being annexed and recorded, and the same shall thereafter have the same effect in law to all intents and purposes as though it had been embraced in the original description and Specification.

XVIII. Any person who shall obtain such Letters Patent, or his assignee, may, if he think fit, enter

with the Colonial Secretary a disclaimer of any part of either the title of the invention, or of the Specification, stating the reason for such disclaimer, or may enter a memorandum of any alteration in the said title or Specification, not being such disclaimer or such alteration as shall extend the exclusive right granted by the said Letters Patent, and such disclaimer or memorandum of alteration, being deposited with the Colonial Secretary, shall be deemed and taken as part of such Letters Patent or such Specification, and subject to the several incidents thereof: Provided that no such disclaimer or alteration shall be receivable as evidence in any action (save and except in any proceeding by *scire facias*), pending at the time when such disclaimer or alteration was enrolled; but in every such action the original title and Specification alone shall be deemed and taken to be the title and Specification of the invention for which the Letters Patent have been or shall have been granted.

XIX. If any person shall wilfully make or cause to be made any false entry or alteration in any register or assignment of Patents as aforesaid, or in any Specification, or shall wilfully make or forge, or cause to be made or forged, any false writing purporting to be a copy of any entry in the said book, or of any such Patent or Specification, or shall produce or tender, or cause to be produced or tendered, in evidence any such writing, knowing the same to be false or forged, or shall wilfully make any false affirmation before any justice of the peace respecting any of the matters concerning which an affirmation is hereby required to be made as aforesaid, he shall be guilty of a misdemeanor, and on conviction thereof shall be punished by fine and imprisonment at the discretion of the Court.

XX. No person shall receive a Patent under this Act for an invention or discovery which has been previously patented in Great Britain or any other country, but it shall be lawful for the Governor, in his discretion, on the application of any person being the holder or assignee of any Patent granted in Great Britain or any other country for any new discovery or invention, and upon such proof as the Governor may deem sufficient that such person is the *bonâ fide* holder or assignee of the said Patent, and that the same is in full force, and upon payment to the Colonial Treasurer of the sum of ten pounds, to grant letters of registration under the seal of the Colony to the holder of such Patent as aforesaid, or his assignee, and such letters of registration shall be deposited in the office of the Colonial Secretary, and shall be deemed to be Letters Patent granted under this Act for such invention or improvement, and shall have the same force and effect as Letters Patent granted thereunder, and shall, unless repealed by writ of *scire facias*, or otherwise, enure to the benefit of the holder during the continuance of the original Patent in the country in which it was granted, and no longer; and all the provisions of this Act shall apply to such letters of registration, in the same way, *mutatis mutandis*, and as fully, as to Letters Patent granted under this Act.

XXI. That if any action at law or any suit in equity for an account shall be brought in respect of an alleged infringement of such Letters Patent heretofore or hereafter granted, or any *scire facias* to repeal such Letters Patent, and if a verdict shall pass for the Patentee or his assigns, or if a final decree or decretal order shall be made for him or them upon the merits of the suit, it shall be lawful for the Judge before whom such action shall be tried to certify on the record, or the Judge who shall make such decree or order, to give a certificate under his hand that the validity of the Patent came in question before him; which record or certificate being given in evidence in any other suit or action whatever touching such Patent, if a verdict shall pass or decree or decretal order be made in favour of such Patentee or his assigns, he or they shall receive treble costs in such suit or action, to be taxed at three times the taxed costs, unless the Judge making such second or other decree or order, or trying such second or other action, shall certify that he ought not to have such treble costs.

XXII. In any action against any person for infringing any Letters Patent the defendant on pleading thereto shall give to the plaintiff, and in any *scire facias* to repeal such Letters Patent the plaintiff shall file with his declaration, a notice of any objections on which he means to rely at the trial of such action; and no objection shall be allowed to be made on behalf of such defendant or plaintiff respectively at such trial, unless he proves the objections stated in such notice: Provided always, that it shall be lawful for any Judge at chambers, on summons served by such defendant or plaintiff on such plaintiff or defendant respectively, to show cause why he should not be allowed to offer other objections, whereof notice shall not have been given as aforesaid, to give leave to offer such objections on such terms as to such Judge shall seem fit.

XXIII. In any action brought for infringing the right granted by any Letters Patent, in taxing the costs thereof regard shall be had to the part of such case which has been proved at the trial, which shall be certified by the Judge before whom the same shall be heard, the costs of each part of the case shall be given according as either party has succeeded or failed therein, regard being had to the notice of objections as well as to the statements or counts in the declaration, and without regard to the general result of the trial.

XXIV. If any person shall write, paint, or print, or mould, cast, or carve, or engrave or stamp, upon anything made, used, or sold by him, for the sole making or selling of which he hath not or shall not have obtained Letters Patent, the name or any imitation of the name of any other person who hath or shall have obtained Letters Patent for the sole making and vending of such thing, without leave in writing of such Patentee or his assigns, or if any person shall, upon such thing not having been purchased from the Patentee, or some person who purchased it from or under such Patentee, or not having the license or consent in writing of such Patentee or his assigns, write, paint, print, mould, cast, carve, engrave, stamp, or otherwise mark the words "Patent," the words "Letters Patent," or the words by the "Queen's Patent," or any words of the like kind, meaning, or import, with a view of imitating or counterfeiting the stamp, mark, or other device of the Patentee, or shall in any other manner imitate or counterfeit the stamp or mark or other device of the Patentee, he shall for every such offence be liable to a penalty of fifty pounds, to be recovered by action in the Supreme Court by any person to whom Letters Patent shall be granted under the

provisions of this Act, or by his assignee: Provided always, that nothing herein contained shall be construed to extend to subject any person to any penalty in respect of stamping or in any way marking the word "Patent" upon anything made, for the sole making or vending of which a Patent before obtained shall have expired.

XXV. In the construction of this Act the word "person" shall include bodies corporate and companies, as well as individuals, unless the context be repugnant thereto.

XXVI. Nothing in this Act contained shall be deemed to interfere with Her Majesty's royal prerogative in granting or issuing or withholding the grant or issue of any Letters Patent.

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Blackburn (*Town Hall*).
Bolton-le-Moors (*Public Library, Exchange Buildings*).
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Canterbury (*Municipal Museum, Guildhall Street*).
Carlisle (*Public Free Library, Police Office*).
Chester (*Town Hall, Northgate Street*).
Cork (*Royal Cork Institution, Nelson Place*).
Crewe (*Railway Station*).
Darlington (*Mechanics' Institute, Skinnergate*).
Dorchester.
Drogheda.
Dublin (*Royal Dublin Society, Kildare Street*).
Dundalk.
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Wakefield (*Mechanics' Institution, Barstow Square*).
Warrington (*The Museum and Library*).
Waterford (*Town Hall, The Mall*).
Wednesbury (*Board of Health Offices*).
Wexford (*Mechanics Institute, Crescent Quay*).
Wigan.
Wolverhampton (*School of Practical Art, Darlington Street*).
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The Commissioners' publications have also been presented to the following Public Offices, Seats of Learning, British Colonies, and Foreign States:—

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——— Steam Branch.
——— Deptford Dockyard.
——— Woolwich ditto.
——— Chatham ditto.
——— Sheerness ditto.
——— Portsmouth ditto.
——— Devonport ditto.
——— Pembroke ditto.
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——— Small Arms Factory, Enfield.
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East India House. Military Stores, Leadenhall Street.
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Netherlands—Ministère de l'Intérieur, The Hague.
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2. A Treatise of Metallica, but not that which was published by Mr. Simon Sturtevant, upon his Patent, &c. By JOHN ROVINSON. (*Letters Patent, granted A.D.* 1612.) Price 4*d*
3. A Commission directed to Sir Richard Wynne and others to inquire upon oath whether NICHOLAS PAGE or Sir NICHOLAS HALSE was the first inventor of certaine kilnes for the drying of malt, &c. &c. (*Letters Patent, Nos.* 33 *and* 85, *respectively dated 8th April*, 1626, *and 23rd July*, 1635.) Price 2*d.*
4. DUD DUDLEY'S Metallum Martis; or iron made with pit-coale, sea-coale, &c. (*Letters Patent, Nos.* 18 *and* 117, *respectively dated 22nd February*, 1620 *and 2nd May*, 1638.) Price 8*d.*
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6. An exact and true definition of the stupendous Water-commanding Engine, invented by the Right Honourable (and deservedly to be praised and admired) EDWARD SOMERSET, Lord Marquis of WORCESTER, &c. &c. (*Stat.* 15 *Car. II. c.* 12. *A.D.* 1663.) Price 4*d.*
7. Navigation Improved; or the art of rowing ships of all rates in calms, with a more easy, swift, and steady motion than oars can. By THOMAS SAVERY. (*Letters Patent, No.* 347, *dated 10th January*, 1696.) Price 1*s.*
8. The Miner's Friend; or an engine to raise water by fire described, &c. By THOMAS SAVERY. (*Letters Patent, No.* 356, *dated 25th July*, 1698, *and Stat.* 10 *&* 11 *Will. III. c.* 31. *A.D.* 1699.) Price 1*s.*
9. Specimina Ichnographica; or a brief narrative of several new inventions and experiments, particularly tho navigating a ship in a calm, &c. By JOHN ALLEN, M.D. (*Letters Patent, No.* 513, *dated 7th August*, 1729.) Price 8*d.*
10. A description and draught of a new-invented Machine for carrying vessels or ships out of or into any harbour, port or river, against wind and tide, or in a calm, &c. By JONATHAN HULLS. (*Letters Patent, No.* 556, *dated 21st December*, 1736.) Price 8*d.*
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B. WOODCROFT.

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No. 862. TUESDAY, APRIL 8, 1862. Price 2d.

Applications for Letters Patent.

(*4th, 5th, and 7th April*, 1862.)

951. JOHN FRANCIS WOODALL, of 28, Orchard Street, Portman Square, in the county of Middlesex, for an invention of "Improvements in ventilating carriages for common roads."—Dated 4th April, 1862.

952. JAMES CLARKSON KAY, of Bury, in the county of Lancaster, and WILLIAM HARTLEY, of the same place, Engineers, for an invention of "Certain improvements in steam engines."—Dated 4th April, 1862.

953. FRANCIS SPENCER, of Pendleton, in the county of Lancaster, Manufacturer, for an invention of "Certain improvements in looms for weaving."—Dated 4th April, 1862.

954. WILLIAM RYDER, of Bolton-le-Moors, in the county of Lancaster, Roller and Spindle Maker, for an invention of "Improvements in the construction of machines for forging metals."—Dated 4th April, 1862.

955. FREDERICK COLLIER BAKEWELL, of No. 6, Haverstock Terrace, Hampstead, in the county of Middlesex, for an invention of "Improvements in letter printing machines."—A communication to him from abroad by William Bullock, of Pittsburgh, in the state of Pennsylvania, North America.—Dated 4th April, 1862.

956. THOMAS SILVER, of Philadelphia, United States, for an invention of "Improvements in governors for regulating the speed of steam and other engines."—Dated 4th April, 1862.

957. LEONARD LINDLEY and FREDERICK TAYLOR, Sewing Machine Manufacturers, of Melbourne Street, Mansfield Road, and Comyn Street, Nottingham, in the county of the town of Nottingham, for an invention of "Improvements in sewing and embroidering machines."—Dated 4th April, 1862.

958. HENRY FLETCHER, of 5, Cornwall Crescent, Camden Road, in the county of Middlesex, for an invention of "Improvements in valves for hydraulic presses, and in apparatus connected therewith for making or pressing blocks or bricks of coal or other material."—Dated 4th April, 1862.

959. GEORGE MOULTON, of the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in pentagraph machines used for tracing or engraving rollers or cylinders employed in printing calicoes and other surfaces."—Dated 4th April, 1862.

960. ANDREW WOODHOUSE, of Hindpool, Barrow-in-Furness, in the county of Lancaster, Brick Manufacturer, and THOMAS HUNTER, the younger, of Hindpool, aforesaid, Brick Manufacturer, for an invention of "Improvements in the arrangements of kilns and flues for burning bricks, tiles, quarries, and other like articles, and in utilizing the waste heat of the said kilns, and in stoves for drying bricks, tiles, quarries, and other like articles."—Dated 4th April, 1862.

961. ALFRED JOSEPH HALE, of William Street, Margaret Street, Clerkenwell, in the county of Middlesex, Die Sinker, for an invention of "Improvements in instruments for drawing ovals."—Dated 4th April, 1862.

962. MATTHEW BUTCHER, of Great Yarmouth, in the county of Norfolk, for an invention of "Improvements in apparatus for reefing and furling sails from the deck."—Dated 4th April, 1862.

963. SAMUEL FIELDING, SAMUEL FIELDING the younger, ROBERT FIELDING, and THOMAS FIELDING, all of Smallbridge, near Rochdale, in the county of Lancaster, for an invention of "Improvements in valves and in apparatus for lubricating the same, and other parts of steam engines."—Dated 4th April, 1862.

964. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "An improved case for

holding balls and reels of cotton, silk, and other threads."—A communication to him from abroad by Théophile Denis Gustave Baudouin, residing at Rue Saint Denis, Paris, France.—Dated 4th April, 1862.

965. Jaffray Sceales, of Lloyd's, in the city of London, Surveyor, for an invention of "Improvements in steering ships."—Dated 4th April, 1862.

966. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of iron and steel."—A communication to him from abroad by Aristide Balthazar Berard, of Rue St. Sébastien, Paris, in the empire of France.—Dated 4th April, 1862.

967. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in pumps for ships' use and other purposes."—A communication to him from abroad by Thomas Hansbrow, of the city and county of Sacramento, California, United States of America. —Dated 4th April, 1862.

968. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improvement in projectiles for ordnance."—A communication to him from abroad by Henry Tatem Potter, of Sprague, county of New London, Connecticut, United States of America.—Dated 4th April, 1862.

969. John Nock and William Kirby Price, of Birmingham, in the county of Warwick, Gas Stove Manufacturers, for an invention of "An improvement or improvements in gas cooking ranges."—Dated 4th April, 1862.

970. John Doddridge Humphreys, of 11, Aldhous Terrace, Barnsbury, in the county of Middlesex, Engineer, for an invention of "Improvements in furnaces and machinery employed in the manufacture of compound fuel and other matters."—Dated 4th April, 1862.

971. Mowbray Walker, of St. Benets Place, Gracechurch Street, in the city of London, Accountant, for an invention of "Improvements in breech-loading rifles and other fire-arms, and in ordnance."—Dated 4th April, 1862.

972. William Begg, of Marsh Lane Foundry, Preston, in the county of Lancaster, Iron Founder, for an invention of "Improvements in consuming smoke, and in furnace bars and bridges for effecting the same."—Dated 5th April, 1862.

973. Henry Joseph Simlick, of Baker's Arms Gardens, Wellington Row, Bethnal Green, in the county of Middlesex, Vesuvian Manufacturer, for an invention of "Improvements in the manufacture of vesuvians or cigar lights."—Dated 5th April, 1862.

974. John Colling, of Seaham, in the county of Durham, Ship Owner, for an invention of "Improvements in apparatus for reefing ships' sails." —Dated 5th April, 1862.

975. Alexander Clark, of Gate Street, Lincoln's Inn Fields, in the county of Middlesex, Engineer and Revolving Shutter Manufacturer, for an invention of "Improvements in the manufacture of revolving window shutters and blinds in window sash bars and plates, also in apparatus used in such manufactures."—Dated 5th April, 1862.

976. Leopold Faconnet, of 52, Rue du Transit Vaugirard, in the city of Paris, in the empire of France, Tile Manufacturer, for an invention of "A new kind of tiles."—Dated 5th April, 1862.

977. Richard Alexander Kobitzoch, of Bucharest, in Wallachia, for an invention of "Improvements in diving apparatus, and apparatus to be used for working in deep water."—Dated 5th April, 1862.

978. Thomas Critchlow, of Bolton-le-Moors, in the county of Lancaster, Engineer, for an invention of "Improvements in planing machines." —Dated 5th April, 1862.

979. Benjamin Thompson, of Walker, near Newcastle-upon-Tyne, for an invention of "Improvements in steam-engines."—Dated 5th April, 1862.

980. Charles Stewart Duncan, of Monmouth Road North, Bayswater, in the county of Middlesex, for an invention of "An improved method of and apparatus for ventilating, cooling, or suppressing fire in public and private buildings or rooms."—Dated 7th April, 1862.

981. Titus Smith, of Salford, in the county of Lancaster, Machinist and Bolt Maker, for an invention of "Improvements in machinery for cutting and shaping screw bolts and other articles."—Dated 7th April, 1862.

982. William Simons, of Renfrew, in the county of Renfrew, North Britain, Ship Builder, for an invention of "Improvements in constructing ships or vessels."—Dated 7th April, 1862.

983. Alfred Harris, of Birmingham, in the county of Warwick, Gun Barrel Manufacturer, for an invention of "An improvement or improvements in the manufacture of gun barrels."—Dated 7th April, 1862.

984. Edward Welch, of Stratford-on-Avon, in the county of Warwick, Gentleman, for an invention of "Improvements in register stoves and fire grates, and in ovens and kitchen ranges."—Dated 7th April, 1862.

985. George Haseltine, of the "International Patent Office," No. 100, Fleet Street, in the city of London, Counsellor-at-Law, for an invention of "Improvements in lamps especially designed for burning hydro-carbon oils."—A communication to him from abroad by Anson Platt, M.D., and General William Rosecrans, of Cincinnati, Ohio, in the United States of America.—Dated 7th April, 1862.

986. William Newzam Nicholson, of Newark, in the county of Nottingham, Agricultural Implement Maker, for an invention of "Improvements in ranges and stoves."—Dated 7th April, 1862.

987. Thomas Jackson, of Orchard Street, Portman Square, in the county of Middlesex, Pianoforte Manufacturer, for an invention of "Improvements in pianofortes."—Dated 7th April, 1862.

988. Joseph Watremez, Merchant, at Aix-la-Chapelle, and Aloys Kloth, Merchant, at Aix-la-Chapelle, for an invention of "Improved apparatus for indicating a deficiency of water in steam generators."— Dated 7th April, 1862.

989. James Carrington, of Queen's Gate Mews, Kensington, in the county of Middlesex, Groom, for an invention of "Improvements in paving stables and stable yards."—Dated 7th April, 1862.

Notices to Proceed.

Notice is hereby given, that

2955. James Ronald, of Liverpool, in the county of Lancaster, Merchant, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in machinery used for spinning hemp, flax, manilla, wool, and like fibrous material, and for the manufacture of 'topped-up,' 'formed,' or 'laid' thread, twine, cord, line, cable, and other cordage."

As set forth in his petition, recorded in the said office on the 25th day of November, 1861.

2993. And Magnus Ohren, of Sydenham, in the county of Kent, Associate of the Institution of Civil Engineers, has given the like notice in respect of the invention of "An improvement in the manufacture of gas, and the apparatus connected therewith."

As set forth in his petition, recorded in the said office on the 27th day of November, 1861.

3002. And Peter Spence, of Newton Heath, near Manchester, in the county of Lancaster, Manufacturing Chemist, has given the like notice in respect of the invention of "Improvements in the treatment of ores for the manufacture of sulphuric acid, and in apparatus connected therewith, which apparatus is also applicable to the treatment of ores for separating metals therefrom."

As set forth in his petition, recorded in the said office on the 28th day of November, 1861.

3008. And Louis Henry Christian Jacob Carle, of Brownlow Street, Holborn, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in means or apparatus for indicating and registering the 'score' for billiards and other games."

As set forth in his petition, recorded in the said office on the 29th day of November, 1861.

3025. And Thomas Wright Gardener Treeby, of No. 1, Westbourne Terrace Villas, Westbourne Square, in the parish of Paddington, London, has given the like notice in respect of the invention of "Improvements in machines for boreing holes in rocks and other hard substances."

3030. And James Leach, of 19, Bronte Place, East Street, Walworth, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in preparing matters to be used in the manufacture of candles."

3032. And John Lyon Field, of Upper Marsh, Lambeth, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in the manufacture of mould candles."

3034. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in artificial teeth."—A communication to him from abroad by Samuel Stockton White, of the city of Philadelphia, Pennsylvania, United States of America.

As set forth in their respective petitions, all recorded in the said office on the 3rd day of December, 1861.

3037. And Thomas Stead, Cotton Spinner, and William Higham, Overlooker, both of Ashton-under-Lyne, in the county of Lancaster, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for spinning cotton or other fibrous materials."

3044. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in albums or books for containing and showing photographic and other pictures, and in slides for the same."—A communication to him from abroad by Henry Strauss, of Paris, France.

3045. And Abraham Pullan, of New Cross, in the county of Surrey, Engineer, and William Lake, of the same place, Mechanical Draughtsman, have given the like notice in respect of the invention of "Improvements in traction and other engines, and in wheels for traction engines and other carriages, and in giving motion to ploughs and other agricultural machines."

As set forth in their respective petitions, all recorded in the said office on the 4th day of December, 1861.

3058. And John Bailey and William Henry Bailey, of the Albion Works, Salford, near Manchester, in the county of Lancaster Turret Clock Makers, have given the like notice in respect of the invention of "Improvements in apparatus for indicating the pressure of steam and gases, the amount of vacuum, the flow of fluids, the weight of materials, and the speed of bodies, either revolving or traversing, and also the employment of alluminum or its alloys in the manufacture of the same."

3060. And John David Napier, of Glasgow, in the county of Lanark, North Britain, Engineer, has given the like notice in respect of the invention of "Improvements in brakes."—A communication to him from abroad by Robert Napier, residing at Newcastle, New South Wales.

As set forth in their respective petitions, both recorded in the said office on the 6th day of December, 1861.

3079 And Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "Improved natatory apparatus."—A communication from Léon Lejuste, a person resident at No. 63, Rue du Cantcleux, Douai, France.

3080. And Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, has given the like notice in respect of the invention of "A new or improved combination of microscopic photographs, and lenses with certain precious stones, or imitations thereof."—A communication from Louis Henri Bouillette and Jean Amable Hyvelin, persons resident at No. 31, Rue Michel-le-Comte, Paris, France.

3082. And John Fordred, of Brighton, in the county of Sussex, has given the like notice in respect of the invention of "Improvements in treating linseed oil."

As set forth in their respective petitions, all recorded in the said office on the 9th day of December, 1861.

3106. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "A new or improved method of treating teazles or thistles to be used in the teazling of cloths and stuffs and otherwise."—A communication to him from abroad by Adolphe André Gohin, of Vire, France.

As set forth in his petition, recorded in the said office on the 11th day of December, 1861.

3135. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "An improved arrangement of fire escape."—A communication to him from abroad by Aaron Shute, of Flushing, in the county of Queens, and state of New York, United States of America.

As set forth in his petition, recorded in the said office on the 13th day of December, 1861.

3164. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "Improved hoisting apparatus."—A communication to him from abroad by John James Doyle and James Christison, both of the city of New York, United States of America.

As set forth in his petition, recorded in the said office on the 17th day of December, 1861.

3246. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in steam generators and in fire-bars employed therein."—A communication to him from abroad by Alexandre Friedmann and Emile d'Erlanger, both of Paris, France.

As set forth in his petition, recorded in the said office on the 27th day of December, 1861.

3263. And Thomas Green and Willoughby Green, both of Smithfield Iron Works, in Leeds, in the county of York, and Robert Mathers, of Trafalgar Street in Leeds aforesaid, Engineer, have given the like notice in respect of the invention of "Improvements in chains for giving motion to chain wheels, and in giving motion to machinery."

As set forth in their petition, recorded in the said office on the 31st day of December, 1861.

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119. And Edward Henry Cradock Monckton, of Fineshade, in the county of Northampton, Esq., has given the like notice in respect of the invention of "Improvements in apparatus for obtaining and applying motive power."

As set forth in his petition, recorded in the said office on the 16th day of January, 1862.

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149. And Robert Ogden Doremus and Bern Lum Budd, of New York, United States of America, Chemists, have given the like notice in respect of the invention of "Improvements in making cartridges."

As set forth in their petition, recorded in the said office on the 20th day of January, 1862.

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177. And John Cresswell Johnson, of the town of Nottinghom, Lace Maker, has given the like notice in respect of the invention of "Improvements in the manufacture of twist lace in twist lace machines."

As set forth in his petition, recorded in the said office on the 23rd day of January, 1862.

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199. And John Wright, of Rochester, in the county of Kent, Civil Engineer, has given the like notice in respect of the invention of "Improvements in constructing works below water."

As set forth in his petition, recorded in the said office on the 25th day of January, 1862.

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289. And Thomas Mossom Meekins, LL.D., of the Inner Temple, Esquire, Barrister-at-Law, and of 44, Chancery Lane, in the county of Middlesex, has given the like notice in respect of the invention of "The production of a projectile and explosive force to be used in instruments of war, for an electric-gas-gun and electric gas shell, for a method of using the recoil of weapons for the purpose of increasing the pressure of elastic fluids for the production of a projectile force, for a method of rapidly loading weapons at the breech, and of a motive force to be used in an electric gas engine or other engines."

As set forth in his petition, recorded in the said office on the 4th day of February, 1862.

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340. And James Dickson, of 66, Tollington Road, Holloway, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in voltaic apparatus, and in the production of voltaic electricity."

As set forth in his petition, recorded in the said office on the 10th day of February, 1862.

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387. And Richard Hornsby, junior, of the Spittlegate Works, Grantham, in the county of Lincoln, has given the like notice in respect of the invention of "improvements in apparatus for thrashing, elevating, cleansing, and separating grain, and in apparatus for elevating straw."

393. And James Edward McConnell, of Wolverton, in the county of Buckingham, Engineer, has given the like notice in respect of the invention of "Improvements in railway breaks, and in warming railway carriages."

395. And William George Valentin, of the Royal College of Chymistry, Government School of Mines, Oxford Street, in the county of Middlesex, Chymist, has given the like notice in respect

of the invention of "An improved mode of and apparatus for, coking coal."
As set forth in their respective petitions, all recorded in the said office on the 13th day of February, 1862.

475. And GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in apparatus for elevating hay, straw, and earth."—A communication to him from abroad by Levi Beardsley, a person resident at Boston, United States of America.
As set forth in his petition, recorded in the said office on the 22nd day of February, 1862.

510. And JOSEPH WHITWORTH, of Manchester, in the county of Lancaster, has given the like notice in respect of the invention of "Improvements in manufacturing and preparing projectiles, and in apparatus to be used for those purposes."
As set forth in his petition, recorded in the said office on the 25th day of February, 1862.

561. And SAM HAGUE, of Westwinsted, Litchfield county, in the state of Connecticut, America, but having a temporary residence in the town and county of the town of Nottingham, Cutler, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for raising hammers and stamping with them hot or cold metals."
As set forth in his petition, recorded in the said office on the 1st day of March, 1862.

584. And FREDERICK BURNETT HOUGHTON, of 6, Clarendon Terrace, Kensington, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in the manufacture of paper."
As set forth in his petition, recorded in the said office on the 3rd day of March, 1862.

599. And JOHN CHUBB, of St. Paul's Churchyard, in the city of London, Patent Lock and Safe Manufacturer, and HENRY MORTIMER BURTON, of John's Place, Holland Street, Southwark, in the county of Surrey, Engineer, have given the like notice in respect of the invention of "Improvements in apparatus for displaying or exhibiting jewelry and other valuable articles in glass cases."
As set forth in their petition, recorded in the said office on the 5th day of March, 1862.

624. And SIDNEY SAMUEL BROMHEAD, of Bristol, in the county of Gloucester, Ironmonger, has given the like notice in respect of the invention of "Improvements in the construction of boxes or receptacles for coals."
As set forth in his petition, recorded in the said office on the 8th day of March, 1862.

682. And LUCIEN VIDIE, of Paris, France, Gentleman, has given the like notice in respect of the invention of "Improvements in the construction of ancroid barometers, partly applicable to steam gauges."

683. And JOHN CUNNINGHAM and ROBERT CUNNINGHAM, both of Paisley, in the county of Renfrew, North Britain, Card Perforators, have given the like notice in respect of the invention of "An improved ornamental fabric and improvements in weaving and in Jacquard apparatus."

685. And GODFREY ERMEN, of Manchester, in the county of Lancaster, Sewing Thread Manufacturer, has given the like notice in respect of the invention of "An improved receptacle or case for the protection of threads of cotton, silk, or other fibrous substances, when in a 'spooled,' 'balled,' or otherwise wound state, or for the reception of 'tapes.'"

700. And JOHN KENT, of Moscow, in the kingdom of Russia, Hosier, at present residing at Hyson Green, Nottingham, in the county of Nottingham, has given the like notice in respect of the invention of "Improvements in cleansing and bleaching."—Partly the result of communication from abroad made to him by Theodor Schnebely, a person resident at Moscow aforesaid, and partly of invention and discovery made by himself.
As set forth in their respective petitions, all recorded in the said office on the 13th day of March, 1862.

720. And HENRY YOUNG DARRACOTT SCOTT, of Brompton Barracks, near Chatham, in the county of Kent, Captain in the Royal Engineers, has given the like notice in respect of the invention of "Improvements in the manufacture of cement."

722. And JOHN AVERY, of 26, Mark Lane, in the city of London, has given the like notice in respect of the invention of "Improvements in purifying coal."—A communication to him from abroad by John Reed, a person resident at New York, United States of America.
As set forth in their respective petitions, both recorded in the said office on the 15th day of March, 1862.

727. And WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "Improvements in water meters."—A communication to him from abroad by Mr. Frank Grant Johnson, of Brooklyn, King's county, State of New York, United States of America, Doctor of Medicine.

739. And JOHN MINTON COURTAULD, of Braintree, in the county of Essex, Manufacturer, has given the like notice in respect of the invention of "Improvements in power looms."
As set forth in their respective petitions, both recorded in the said office on the 17th day of March, 1862.

769. And RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in rotary engines."—A communication to him from abroad by Serkis Ballian, of Constantinople, Turkey.
As set forth in his petition, recorded in the said office on the 19th day of March, 1862.

893. And JOSEPH PAGE WOODBURY, of the city of Boston, in the county of Suffolk, in the Commonwealth of Massachusetts, one of the United States of America, has given the like notice in respect of the invention of "An improvement in arming war vessels."
As set forth in his petition, recorded in the said office on the 31st day of March, 1862.

910. And Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "An improved furnace for treating iron ore."—A communication to him from abroad by Joseph Alexandre Marcel Bonne, of Cluis, in the French empire.

As set forth in his petition, recorded in the said office on the 1st day of April, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

8th April, 1862.

2534. Benjamin Browne, of No. 52, King William Street, in the city of London, Civil Engineer, and Patent Agent, for an invention of "A new improved spring."—A communication to him from abroad by Perry Green Gardiner, of New York, city, in the county and state of New York, in the United States of America."—Dated 10th October, 1861.

2549. John Carter Ramsden, of Bradford, in the county of York, Stuff Manufacturer, for an invention of "Improvements in healds or heddles for weaving, and in the machinery or apparatus for making the same"—Dated 12th October, 1861.

2559. Henry John Distin, of No. 9, Great Newport Street, Leicester Square, in the county of Middlesex, Musical Instrument Manufacturer, for an invention of "Improvements in metal musical wind instruments."—Dated 14th October, 1861.

2564. John Flinn, the elder, of Coventry, Watch Manufacturer, for an invention of "Improvement in Watches."—Dated 15th October, 1861.

2619. Henry Bloxam, the younger, of Shrewsbury, in the county of Salop, Engineer, for an invention of "Improvements in sights for rifles and ordnance."—Dated 19th October, 1861.

2624. Edward Oldfield, of the firm of Messieurs Oddy and Oldfield, of the Adelphi Iron Works, Salford, in the county of Lancaster, Machine Makers, for an invention of "Improvements in self-acting mules for spinning and doubling."—Dated 21st October, 1861.

2680. Bernard Joachim La Mothe, of the city and state of New York, in the United States of America, for an invention of "Improvements in the construction of metallic rail-road cars and other vehicles."—Dated 25th October, 1861.

2703. Oliver Bayliss, of Birmingham, in the county of Warwick, Gun Barrel Maker, for an invention of "Improvements in double sighted double rifle guns for military and sporting purposes."—Dated 29th October, 1861.

2743. Benjamin Mitchell, of Greenwich, in the county of Kent, Tailor, and William Brunton, of Penge, in the county of Surrey, Engineer, for an invention of "Improvements in the construction of scissors and shears."—Dated 1st November, 1861.

2784. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in electroplating or depositing metals."—A communication to him from abroad by Jabez Ellis Walcott, of Boston, Massachusetts, in the United States of America.—Dated 5th November, 1861.

2786. Herman D. Bradt, of Boston, in the state of Massachusetts, of the United States of America, for an invention of "Certain new and useful improvements in machinery for lasting and pegging shoes."—A communication to him from John Taggart, a person resident at Roxbury, in the said state.—Dated 6th November, 1861.

2841. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in skates."—A communication to him from abroad by Daniel Hartwell Shirley, of Boston, in the state of Massachusetts, United States of America.—Dated 12th November, 1861.

2907. Benjamin Davenport Godfrey, of Milford, in the county of Worcester, state of Massachusetts, U. S. A., for an invention of "An improved boot or shoe with a wooden shank part and a flexible fore part to the sole."—Dated 19th November, 1861.

3041. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in pumps."—A communication to him from abroad by Calvin Woodward and George Mills Woodward, both of New York, United States of America.—Dated 4th December, 1861.

3191. Joseph Westwood, of the London Yard, Poplar, in the county of Middlesex, Ship Builder, for an invention of "An improvement in the construction of hydraulic presses."—Dated 20th December, 1861.

3221. Alfred Vincent Newton, of the Office for Patents, 66 Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improved means for reducing the friction and wear of slide valves of steam engines."—A communication to him from abroad by Andrew Buchanan, of Jersey city, state of New Jersey, United States of America.—Dated 24th December, 1861.

217. John Hunt, of Birmingham in the county of Warwick, brassfounder, for an invention of "An improvement or improvements in the manufacture of gas and other chandeliers."—Dated 28th January 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 5th April*, 1862, *inclusive.*)

2nd April, 1862.

830. Arthur Paget, of Loughborough, in the county of Leicester, Manufacturer, for an invention of "Improvements in machinery or apparatus for the manufacture of looped fabrics, and in the manner of constructing the same."—Dated 2nd April, 1859.

846. Edmund Morewood, of Enfield, in the county of Middlesex, for an invention of "Improvements in coating metals."—Dated 4th April, 1859.

889. James Hadden Young, of 66, Great College Street, Camden Town, London, county of Middlesex, for an invention of "Improvements in setting up (composing) and distributing types."—Dated 9th April, 1859.

1124. John Scholfield, of Milnrow, near Rochdale, in the county of Lancaster, Cotton Spinner, and William Cudworth, of the same place, Manager, for an invention of "Certain improvements in machinery or apparatus for spinning cotton and other fibrous materials."—Dated 5th May, 1859.

3rd April.

850. Edward Fairburn, of Kirklees Mills, Mirfield, in the county of York, Card Manufacturer, for an invention of "Improvements in machinery for carding wool and other fibrous substances."—Dated 5th April, 1859.

4th April.

853. George Frederic Chantrell, of Liverpool, in the county of Lancaster, Furnace Engineer, and Edward Dutch, of the same place, Commercial Traveller, for an invention of "Improvements in the apparatus for regulating the quantity of water to be used for the flushing of waterclosets and other purposes." — Dated 5th April, 1859.

862. William Owen, of Rotherham, in the county of York, Engineer, for an invention of "Improvements in the manufacture of railway wheels and tyres, and in the apparatus employed therein."—Partly a communication from Robert Owen, residing at San Ge Ronimo, Central America.—Dated 6th April, 1859.

873. John Talbot Pitman, of the American and European Patent Offices, No. 67, Gracechurch Street, London, for an invention of "Improvement in the construction and use of fireworks for signals."—A communication from abroad by Martha J. Coston, of the city of Washington, D.C., in the United States of America.—Dated 8th April, 1859.

883. William Henderson, of Alderley Edge, in the county of Chester, Chemist, for an invention of "Improvements in treating certain ores and in obtaining products therefrom."—Dated 8th April, 1859.

935. Jozé Luis, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, for an invention of "A new cooling apparatus for liquids, especially beer."—A communication from abroad by Jean Louis Baudelot, of No. 10, Rue Mogador, Paris, in the empire of France.—Dated 14th April, 1859.

957. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of alumina."—A communication from abroad by Mr. Le Chatelier, of Paris.—Dated 16th April, 1859.

5th April.

863. Joseph Rogers, of 9, Queen Square, Bartholomew Close, in the city of London, Rope Maker, and Edward Johnson Tweed, of 22, Castle Street, Falcon Square, also in the city of London, for an invention of "Improvements in coating conducting wires used for electric telegraphic purposes."—Dated 6th April, 1859.

881. William Hooper, of Mitcham, in the county of Surrey, India-rubber Manufacturer, for an invention for "Improvements in insulating and protecting telegraphic conductors."—Dated 8th April, 1859.

933. John Hughes, William Williams, and George Leyshon, of Brockmoor Works, Brierly Hill, Staffordshire, for an invention of "Improvements in the manufacture of tin and terne plates."—Dated 13th April, 1859.

996. Henry Rawson, of Leicester, for an invention of "Improvements in machinery for combing wool and other fibres."—Dated 20th April, 1859.

Patent on which the Stamp Duty of £100 has been Paid, and Date of its Production for Certificate.

1st April, 1862.

736. William Lund, of Fleet Street, in the city of London, Manufacturer, and William Edward Hipkins, Foreman to the said William Lund, for an invention of "Improvements in the manufacture of cork-screws."—Dated 2nd April, 1855.

Erratum in Journal of 4th April, 1862.

761. For "instruments" read "instrument."

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

UNITED STATES OF AMERICA.

ANNUAL REPORT OF THE COMMISSIONER OF PATENTS.

UNITED STATES PATENT OFFICE,
January 31, 1862.

SIR,

In conformity with the requirements of the 14th section of the act of March 3, 1837, entitled "An act in addition to the act to promote the progress of science and useful arts," I most respectfully submit the following report:

In the section of the act above referred to it is declared to be the duty of the Commissioner of Patents "to lay before Congress, in the month of January, annually, a detailed statement of the expenditures and payments by him made from said (patent) fund. And it shall also be his duty to lay before Congress, in the month of January, annually, a list of all patents which shall have been granted during the preceding year, designated under proper heads, the subjects of such patents, and furnishing an alphabetical list of the patentees, with their places of residence; and he shall also furnish a list of all patents which shall have become public property during the same period, together with such other information of the state and condition of the Patent Office as may be useful to Congress or to the public."

The first provision of the above instructions to the Commissioner requires "a detailed statement of the expenditures and payments by him made." For a more complete and intelligible exposition of the affairs of the office, I beg leave to submit the following statement:—

No. 1.

Number of applications received during the year	4,643
Number of patents granted, including designs, re-issues, and additional improvements	3,340
Number of caveats filed	700
Number of applications for extension of patents	16
Number of patents extended	21
Number of patents expired, 31st December, 1861	546

No. 2.

Statement of moneys received during the year.

	$
On applications for patents, re-issues, designs, additional improvements, extensions, caveats, disclaimers, and appeals	125,601 00
For copies, and for recording assignments	11,753 44
Total	137,354 44

No. 3.

Statement of expenditures from the patent fund during the year.

	$
For salaries	92,868 92
For contingent expenses	59,502 36
For temporary clerks	43,791 31
For withdrawals	23,173 32
For refunding money paid by mistake	1,306 00
For judges in appeal cases	850 00
Total	221,491 91

No. 4.

Statement of the condition of the patent fund.

	$
Amount to credit of patent fund on January 1, 1861	89,554 07
Amount paid in during the year	137,354 44
Total	226,908 51
From which deduct expenditures during the year	221,491 91
Which leaves to the credit of the Patent Fund, January 1, 1862	5,416 60

No. 5.

Quarterly statement of expenditures for 1861.

	$
First quarter	61,050 23
Second quarter	62,439 25
Third quarter	52,104 58
Fourth quarter	45,897 85
Total expenditure	221,491 91

No. 6.

Table exhibiting the business of the office for twenty-five years, ending December 31, 1861.

Years.	Applications filed.	Caveats filed.	Patents issued.	Cash received.	Cash expended.
				$	$
1837	-	-	435	29,289 08	33,506 98
1838	-	-	520	42,123 54	37,402 10
1839	-	-	425	37,260 00	34,543 51
1840	765	228	473	38,056 51	39,020 67
1841	847	312	495	40,413 01	52,666 87
1842	761	291	517	36,505 68	31,241 48
1843	819	315	531	35,315 81	30,776 96
1844	1,045	380	502	42,509 26	36,344 73
1845	1,246	452	502	51,076 14	39,395 65
1846	1,272	448	619	50,264 16	46,158 71
1847	1,531	553	572	63,111 19	41,878 35
1848	1,628	607	660	67,576 69	58,905 84
1849	1,955	595	1,070	80,752 78	77,716 44
1850	2,193	602	995	86,927 05	80,100 95
1851	2,258	760	869	95,738 61	86,916 93
1852	2,639	996	1,020	112,056 34	95,916 91
1853	2,673	901	958	121,527 45	132,869 83
1854	3,324	868	1,902	163,789 84	167,146 32
1855	4,435	906	2,024	216,459 35	179,540 33
1856	4,960	1,024	2,502	192,588 02	199,931 02
1857	4,771	1,010	2,910	196,132 01	211,582 09
1858	5,364	943	3,710	203,716 16	193,193 74
1859	6,225	1,097	4,538	245,942 15	210,278 41
1860	7,653	1,084	4,819	256,352 59	252,820 80
1861	4,643	700	3,340	137,354 44	221,491 91

While the aggregate receipts of the office have been but $137,354 44, the expenditures have amounted to $221,491 91.

By the act of March 2, 1861, the expenses of the office were largely increased, as follows:—

	$
Salaries of examiners in chief	6.437 53
Salaries of commissioner and chief clerk	1,500 00
Printing	17,854 37
Total	25,791 90

The receipts of the past year have fallen $118,998 15 below those of the previous year; and the expenditures, omitting the above $25,791 90 as extra, have been $51,220 79 less than those of 1860. The cause of this great falling off of receipts must be apparent to every reader. The great inventive mind of the country has been attracted in another direction by the startling scenes of rebellion which have transpired. A state of civil war has deprived this office of the patronage of most of the slave-holding states; the enterprise of the loyal states has, to a great degree,

been paralyzed; and the sale of patent rights, as an article of traffic, has, in a great measure, been abandoned.

To provide for this state of affairs I have been compelled to resort to a most rigid economy. To bring the expenditures as nearly as possible within the ability of the office to meet them, by way of retrenchment I dismissed five principal examiners, five assistant examiners, and five second-assistant examiners. The compensation fixed by law of the principal examiners is $2,500; the assistants, $1,800; the second assistants, $1,600. The business required that seven of each of these classes should be retained; but a still further reduction of expenditure being necessary, I dismissed the principal examiners and appointed them assistant examiners, and they are now receiving but $1,800 per year; the assistant examiners were dismissed and appointed second-assistant examiners, at a salary of $1,600; the second assistants were dismissed and appointed clerks, at an annual salary of $1,400. These officers, however, have all been performing the duties pertaining to their original positions. A large reduction was also made in the salaries of the clerks. The temporary clerks, who formerly received ten cents per hundred words for copying, are now paid but eight cents. This was regarded as a legitimate reduction, as the office receives for such work, by law, the same compensation formerly paid the clerks, while the expense of superintending clerks, stationery, &c., exceeded $5,000 per annum. A large number of laborers, watchmen and attendants have been dismissed, and their places are now vacant. The reduction of the salaries of the examiners and clerks has been very onerous to them. The expenses of living in this city are largely increased by the centring here of a large army, and the attraction of thousands of civilians, who largely consume the necessaries of life, which, at all times, are less abundant here than in many other portions of the country. The military necessity, which required the closing of the communication between the farmers of Virginia, from whom a greater part of the usual supplies come, and the market of this city, has contributed much to the expense of living in Washington. For these reasons I respectfully submit to Congress the justice and propriety of conferring upon the Commissioner of Patents authority to refund the difference in the salaries of the examiners and clerks, between the amount allowed by law and that now received by them, whenever, in his opinion, the funds of the office will justify it.

The 14th section of the act approved March 2, 1861, provides "that the Commissioner of Patents be and is hereby authorized to print, or, in his discretion, to cause to be printed, ten copies of the description and claims of all patents which may hereafter be granted, and ten copies of all drawings of the same, when drawings shall accompany the patents; provided, the cost of printing the text of said descriptions and claims shall not exceed, exclusive of stationery, the sum of two cents per hundred words for each of said copies, and the cost of the drawing shall not exceed fifty cents per copy; one copy of the above number shall be printed on parchment to be affixed to the Letters Patent; the work shall be under the direction, and subject to the approval, of the Commissioner of Patents, and the expense of the said copies shall be paid for out of the patent fund.

In accordance with this provision of the law, and with the approval of the Secretary of the Interior, I contracted with a responsible party for the execution of the work. The issues from the 2d of March to the 1st of November, 1861, were printed in a superior style, and the drawing executed in the most satisfactory manner by the photographic art.

This feature of the law has given eminent satisfaction to the inventors of this country, and has commanded the admiration of inventors and the superintendents of patent departments in many other countries. The imperative necessity which required it to be suspended was and is greatly to be deplored; but I earnestly hope that Congress will take the necessary steps to resume it at as early a day as practicable.

The importance of furnishing to the public the most complete practicable information in relation to every patented invention is obvious. Each patent, as the name implies, should be open to the perusal of all, and as it has the effect of a law should be published at the public expense, as all other laws. The people of the country should have full information as to all patented inventions, firstly, that by a knowledge of the full extent of the exclusive privilege claimed by the holder of a patent they may not be exposed to damages for infringing upon it; secondly, that they may not be induced to believe that the holder of a patent has exclusive privilege for more than is described and claimed in his specification; thirdly, that they may be informed as to the actual progress of the useful arts and avail themselves of the most useful inventions; and fourthly, that the whole inventive genius of the country may be stimulated by the examples and suggestions furnished by descriptions and representations of each year's inventions.

Congress has evinced its appreciation of the importance of furnishing such information by the large appropriations which it has heretofore authorized for the publication of the mechanical reports of this office. I have been furnished by the Superintendent of Public Printing with a statement of the cost of printing, paper, binding, &c., of the mechanical reports of this office for each of the last three years, which is as follows:—

		$
1858	3 volumes, 32,950 copies, cost - -	85,659,08
1859	2 volumes, 68,550 copies, cost - -	138,700,32
1860	2 volumes, 66,550 copies, cost - -	118,992,09

These reports contain merely brief abstracts of the specifications made originally by examiners in the office, and latterly furnished by individuals out of the office by contract, and consequently prepared with the least possible expenditure of labour and expense, with the claims generally unintelligible, without the full description contained in the specifications. Meager and unsatisfactory as these abstracts are, the reports have been most eagerly sought for by the public. The publication of these reports will, I think, prove to have been most wisely suspended, if the substitute can be provided which was intended to be secured by the late law.

In making provision for this great public want Congress should not be unmindful of the examples of other nations most advanced in the mechanical arts. In Great Britain, France, Sardinia, and Belgium, the specifications are published in full, and in such a form that printed copies may be furnished to all who may apply for them at cost price, while the entire publications are extensively distributed for the free use of the public. In Prussia, Saxony, and Bavaria, official journals are published containing full

abstracts and lists of the specifications of patents. The publications of specifications made by the French government consist of 91 volumes, quarto, of the old law, and 35 volumes, quarto, of the law of 1844. All which have been presented to the library of this office.

In Great Britain the publications of the specification and drawings of patents has been made upon a scale of magnificence which entitles it to be regarded as one of her great national works. The Great Seal Patent Office has published the complete specifications and drawings of patents granted by that office since 1623, in two series, the old law series from 1623 to 1852, and the new series from October 1852 to the present time. The old law series, comprising 12,977 patents in number, are contained in about 900 volumes, 450 folio volumes of drawings, and the like number of imperial octavo volumes of letter-press. The indices form seven imperial octavo volumes. The cost of these works in 1859 amounted to 92,000*l.* The expense of printing for 1859 was estimated by the Commissioner of Patents at 17,500*l.*

The publications of the Great Seal Office consist of the specifications and drawings of patents granted (the drawings are not photographic), a subject-matter index of patents, an alphabetical index of patentees, a chronological index of patents, commissioners of patents' journals (published semi-weekly), assignments of specifications of various classes of patents, of which twenty volumes have been published, and all are in course of publication.

The publications are distributed among one hundred and seven libraries and offices in Great Britain, twenty-six libraries in the British Colonies, and twenty-two in foreign countries. Of these last, six are in the United States; the cost of which has been upwards of 10,000*l.* The cost of the continuation is at least 1,500*l.* weekly. For these costly works our government has been able to make no return except the meager abstracts heretofore published by us.

No attempt has been made in the publications ordered by me, under the provisions of the late law, to imitate the costly works published by the Great Seal Office; but the publications, though not wanting in taste and finish, are believed to be of equal practical value. Many advantages have already been presented by a brief trial of this system in this office, among which may be mentioned the readiness of inventors to furnish more artistic and detailed drawings, at a greatly increased expense, with the view of exhibiting these inventions to the best advantage; a change which would greatly facilitate the examinations of the office as well as aid inventors in making inquiries as to the patentability of their inventions. Through the improvement in the drawings, thus effected, and by the adoption of the photographic system of illustration, it is believed that the publications, if continued, would surpass in practical value those of Great Britain.

The depressed condition of the financial affairs of this office incident to the state of the country, has alone induced me to abandon the wise provision of Congress, requiring the printing in full of the specifications and drawings of the patents issued from this office. From a careful examination of the matter, I am induced to believe that if Congress were to appropropriate a sum sufficient to defray the expense heretofore incurred in the printing of the specifications and drawings of the patents, and which will not exceed one-half the sum heretofore expended from the general fund of the government, the office will be able hereafter to meet the expense thus to be incurred. This will enable those who desire copies to secure them at a small cost comparatively with what they now have to pay for manuscript copies. I am induced to believe that an appropriation of fifty thousand dollars for the present year would enable the office to carry out this most salutary provision of the law of the last Congress. An abandonment of the publication of the mechanical reports, rendered unnecessary by the printing of the specifications and drawings, under the law of 2d March, 1861, would save to the government, after making the appropriation above requested, the sum of $.

The restoration to the Patent Office fund of the amount withdrawn from it in conformity with the provision of the law of March 2, 1861, would be an act of simple justice to the inventors of the country, by whom this fund has been contributed. It would seem to be inequitable for them to bear the expense of introducing a new system of publication, the benefits of which are not for themselves but the general public. It is believed that this charge would not have been imposed by Congress upon the Patent fund, if the diminution of then existing surplus fund, in consequence of the financial difficulties of the country, had been anticipated. The inventors have already been heavily taxed for the erection of the Patent Office building. There has been contributed by the patent fund for this purpose:

	$
By act of July 4, 1836	108,000
By act of March 3, 1849	50,000
By act of May 15, 1850	90,000
By act of September 30, 1850, appropriating 110,000 dls., if so much remained in the patent fund	71,000
Making the whole amount contributed	319,000

The appropriation of this fund is justified only by the consideration that the inventors derive the most immediate benefit from the use of the Patent Office building. It cannot be doubted that the whole patent fund should be preserved for the use of those who contributed it, and certainly that the efficiency of the office for whose support this fund is primarily intended should not be impaired by the diversion of any part of it for secondary purposes. Congress has heretofore recognized the propriety of reimbursing the patent fund for all sums withdrawn for the benefit of the general public. Appropriations had from year to year been made of sums to be paid out of the patent fund for the collection of agricultural statistics and the purchase of seeds. By the Act of March 3, 1855, the sum of forty thousand and seventy-eight dollars and seventy-eight cents was appropriated by Congress, to be paid out of any money in the treasury not otherwise appropriated, for the reimbursement of the patent fund of the whole amount thus withdrawn from the fund for the purposes above mentioned.

It is important to be observed that it is indispensable that the printing of these publications should be done under the immediate supervision and control of the office. The specifications and drawings should not be removed from the office, as they are in constant demand for reference, and the inventors demand that there should not be a day's delay in issuing the patents after their date, which will be always liable to happen if the work should be done with other public printing. The type should be set up within the office directly from the specifications. By doing this the cost of copy for the printer and the cost of recording the specifications will be saved, both of which are necessary when the setting of the type is

done out of the office. The saving in these two items are the most important elements of the practicability of continuing the printing at the expense of the office.

As these publications, if continued, will be intended to supply the place of the former Patent Office reports, and the gratuitous distribution to individuals will, of course, be dispensed with, some provision should be made to place them before the public. A sufficient number might be purchased by Congress at the same rate that may be charged to individuals, to place them in the most important libraries in each state, and to make exchanges demanded by national courtesy with foreign governments. A thousand copies, it is believed, will be sufficient to communicate the information as to the inventions of this office as effectually as has been done by the gratuitous distribution to individuals of the former reports.

Proposed Amendments.

By the law of March 2, 1861, it is provided that on filing each original application for a patent, except for a design, fifteen dollars shall be paid, and on issuing each original patent twenty dollars. Practically, this postponement of the payment of the final fee operates disadvantageously to the office. The evidence of the truth of this statement is found in the fact that more than four hundred patents which have been ordered to be issued are now in the office awaiting the payment of the twenty dollars. Thus the office is deprived of more than eight thousand dollars, for which it rendered its time and labour. If this provision should remain as it now is, the number will largely increase, and of course will prove a great loss to the fund, and may prove the source of endless litigation. It may be further observed, that until the additional fees are paid on these applications, each operates as a caveat which may be perpetual without the yearly renewal and fee required in other cases for perpetuating caveats, the public deriving no benefit from the publication of the patent, and other inventors being excluded from obtaining patents for the inventions. I would respectfully suggest that the law be amended, either by restoring the former provision that the whole fee be paid on making the application, twenty dollars to be repaid to the applicant when the application is finally rejected and withdrawn, or that the application fee intended to cover the expense of examination should be increased to twenty-five dollars, and that ten dollars should be required on the issuing of the patent.

The avowed object of the second section of the Act of the 2nd of March, 1861, is "securing greater uniformity of action in the grant and refusal of Letters Patent." This is attempted to be effected by the creation of three examiners-in-chief, whose duty it is made to "revise and determine upon the validity of decisions made by examiners when adverse to the grant of Letters Patent and in interference cases." It was expected by this means to relieve the Commissioner of a portion of the labour of the duties of office imposed upon him, but it has utterly failed to secure this last-named object.

As now constituted under the law the examiners-in-chief form a tribunal independent of the Commissioner in all cases of rejection or interference decided by the examiner. An appeal lies from the examiner to them, from them to the Commissioner, and from him to one of the judges of the Circuit Court of the district of Columbia.

The Chief Justice has decided that an appellant must go through each tribunal before the judge of the Circuit Court can take jurisdiction of his case.

This state of the law and practice is far from beneficial to the public, and does not tend to secure greater uniformity of action in the grant or refusal of Letters Patent, and does certainly greatly augment the labour of the Commissioner. The act, in my opinion, should be so amended as to render the duties of the examiner-in-chief advisory only, so that an appeal, as formerly, may be taken from the examiner or from the Commissioner to the Circuit Court. All appeals should be taken from the decision of the examiner directly to the Commissioner, who could then refer it to the examiners-in-chief, or, if his time permitted, hear it in person.

The disturbed condition of the country has brought to view a deficiency in the patent laws with respect to the protection of the rights of assignees of inventions, which demands the attention of Congress. In many cases patents cannot be awarded to applicants except upon amendment of their specifications and claims. After an application has been once examined and rejected the law requires a renewal of the oath of invention by the inventor before the amended specification can be re-examined. Cases have lately arisen where an inventor having filed his application for a patent, and assigned his whole interest in the invention, has disappeared or is *non inventus*, after the first examination and rejection, although in such case the defects in the specification might be cured by amendment, the inventor cannot be found to renew the oath required by law, and the assignee, the actual holder of the invention, is without remedy. In case of the death of an inventor before a patent shall have been granted for his invention, the right of applying for and obtaining a patent therefore devolves by law upon his executor or administrator. I would recommend that provision be made by law that when the inventor, after making his application and assigning his invention, may not be found, the right of renewing the oath of invention and amending the specification shall devolve upon the assignee.

It is difficult to conceive of any substantial reason for the provision contained in the 7th section of the law of 1836, which requires that an applicant for a patent, before making any alteration in his specification, "shall be required to make oath or affirmation anew." It is certain that no protection to the public is secured by this provision, while the requirement is a matter of great inconvenience to the applicant and the office. The inconvenience of this requirement has been particularly apparent since the number of foreign applications has been greatly increased, in consequence of the reduction of fees made by the law of 1861. Applications from Europe and California have often been delayed for months for the renewal of the oath required before the slightest amendment could be made. I would recommend that the laws be so amended as to dispense wholly with the renewal of the oath of invention.

Copyright.

The duties connected with the custody of all books, maps, and other publications deposited in the Department of the Interior, according to the laws regulating copyrights, having been imposed upon this bureau, for the execution of which duty a yearly appropriation is now required, I beg leave to recommend a reform which will not only save this expendi-

ture, but secure other important advantages to the public.

By the act of Congress approved May 31, 1790, it was required of every person desiring to secure a copyright to deliver a copy of the work to the Secretary of State within six months of its publication, "to be preserved in his office." This requirement continued in force under the amendment of the act approved April 29, 1802, and by the "Act amending the several acts protecting copyrights," approved February 3, 1831, it was required that a copy of the work should within three months of its publication be delivered to the clerk of the district court of the United States of the district wherein the author or proprietor should reside, and that it should be the duty of the clerk once at least in every year to transmit all copies of works thus received to the Secretary of State, "to be preserved in his office." By an act approved February 5, 1859, the Secretary of the Interior was substituted for the Secretary of State, and all works and records heretofore received were ordered to be transmitted by the latter to the former, no change in any other provision of the copyright law being made.

It appears, therefore, that for a period of seventy years, from 1790 to 1860, one copy of every work claiming security of copyright has been required by law to be deposited in an executive department of the Federal Government for a period of forty years by the author directly, and for thirty subsequent years through the agency of clerks of the United States district courts. The result contemplated by this requirement was a collection of copyright matter at the national capital in the lapse of years, as valuable as it would be interesting, and it is to be regretted that circumstances should have tended in any degree to defeat this end.

The earliest record of the receipt of a copyright by the Secretary of State bears date January 19, 1796, although copies of two works, one dated 1794 and the other 1795, are found in the library, of the receipt of which no record exists. From 1796 to 1831, during which period copyrights were required to be transmitted directly to the Secretary of State by the author or proprietor, the record of certificates of receipts is unbroken; and during the eleven years from 1831 to 1841, both inclusive, the register of works received at the Department of State from United States district courts under the act of the former years seems equally perfect. But here ceases all record or register at the Department of State of copyrights received, and for a period of twenty years, from 1841 to 1860, when a register was commenced at this office, whither the service had been transferred, the only source available from which could now be compiled a complete catalogue of all the copyrights entered during that period in the United States, are the lists and records, more or less perfect, transmitted more or less regularly by the clerks of the United States district courts, in accordance with the act.

From 1796 to 1831 the whole number of copyright works actually received at the Department of State was 2,212, while the whole number for the same period received from the Department of State in 1859 at the Patent Office was 929, or less than one half. The whole number of copyrights received at the State Department from 1831 to 1841, both inclusive, was 10,073, while the whole number received at the Patent Office in 1859 was 6,017. The whole number received at the State Department from 1841 to 1859, both exclusive, is estimated in round numbers at 40,000, while the whole number received for the same period at the Patent Office did not exceed 30,000.

Out of some 50,000 copyright works, therefore, deposited in accordance with law to be preserved, from 1790 to 1859, less than 40,000 are now to be found. It appears also from careful comparison of the records of applications for copyright with the list of works received for a series of years, that not more than two-thirds of all the works for which a copyright is requested are ever deposited with the clerks of the district courts of the United States, as is required by the Act of 1831, or, if so deposited, are ever transmitted by the clerks to this city, as is also required.

The evil resulting from the continuance of such a state of things is too obvious to demand comment. It is easy to suppose a case in which the absence of copyright work from the place where the law requires it to be found when called for as a legal voucher might prove extremely detrimental to the interests of its proprietor, especially when it is considered that judicial decisions hold that proof of the fulfilment of the act in the minutest particular is indispensable to the security of the right.

The copyright works now received at this office are carefully registered and preserved, and this done at an annual expense of more than $1,600. That this service may be rendered self-sustaining like the Patent Office, can be readily demonstrated, and thus a saving of the above-named amount be made to the treasury.

At the Stationers' Hall, in London, all applications for copyrights in England are made; from thence all certificates on the subject are issued, and there all works are received for preservation. The same service could be performed at the Patent Office for the United States, and be sustained by the same amount of fees now allowed clerks of the United States district courts by the act of 1831.

Under the existing law, the perfecting of a copyright is made dependent upon the performance of certain duties by district clerks of the United States, no penalty being prescribed for neglect of those duties. These officials are not subject by any law to the directions of the department or office charged with the superintendence of the service. Hence, with perfect impunity, a clerk in one of the districts has for eight years refused to transmit either records or copyrights to this office, in obedience to the law, on plea of insufficiency of compensation. Other clerks are equally negligent of their duties. The present system has utterly failed to secure the object contemplated by the original enactment, and so valuable to those authors who desire protection for their works. Had the plan now suggested been carried out with the same fidelity as has been the Patent Office, we would now have a copy of almost every book, pamphlet, map, chart, and musical composition ever published in this country. I need not enlarge upon the value of such a collection.

It is a subject of congratulation, to which I am happy to refer in closing this report, that notwithstanding the occupation of the public mind with the paramount thought of defending the government, and the apparent diversion of so much activity from peaceful to military pursuits, the business of this

office, so sensitive to any financial or industrial change, shows a vitality in the industrial arts of the country not to have been expected in time of war. Of the applications for patents made during the month of December last, arranged according to the classification of the office, there were in the classes of—

Agricultural implements	63
Calorifics and photics	45
Chemical processes	40
Land conveyance and engineering	59
Fibrous and textile manufactures	9
Fine arts	24
Household furniture	31
Leather, harness, and wearing apparel	42
Lumber, stone, and clay	19
Philosophical and surgical instruments	22
Navigation	8
Steam and air engines, hydraulics and pneumatics	35
Metallurgic manufactures	23
Fire-arms and implements of war	58

It appears by this statement that 420 were for inventions in the peaceful arts, and 58 only in implements of war. Although some of the former are adapted for military use, it would be safe to say that five-sixths are inventions connected with productive industry, a proof that the productive interests of the loyal states have not been materially disturbed by the national convulsion.

As the power to maintain war depends upon the productive labour of the country, and the capacity of production is increased by new inventions, it is hoped that Congress will regard the encouragement of an institution which stimulates and protects the inventive resources of the country as not simply a duty but a national necessity.

D. P. Holloway,
Commissioner of Patents.

Hon. Galusha A. Grow,
Speaker of the House of Representatives.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s*.

EXTENSION of PATENTS to the COLONIES. Abstract of Replies to the Secretary of State's Circular Despatch of January 2, 1853, on the subject of the Extension of Patents for Inventions to the Colonies. Second Edition, with revised Table, 1861. Price 2*s*.

FIRE-ARMS, PROJECTILES, &c.—The series of Specifications and Drawings on this Subject, from 15th May, 1718, to 31st December, 1853, with Alphabetical and Subject-matter Indexes, may be obtained at the cost price of 9*l*. 18*s*. 6½*d*.

The Indexes, separately, price 3*s*.

REAPING MACHINES.—The entire series of Specifications and Drawings on this subject to the end of 1853, together with an Appendix, prepared by B. Woodcroft, of the Patent Office, and published under the sanction of the Commissioners, may be obtained at the cost price of 2*l*. 3*s*. 11½*d*.

List of Specifications published during the week ending 5th April, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
2038	5*s*. 6*d*.	Kesselmeyer, C. W, and Mellodew, T.—Velvets and velveteens.
2080	3*d*.	Wheeler, C. A.—Preventing wind and draught at the foot of doors.
2117	8*d*.	Cranston, J.—Conservatories, orchard houses, &c.
2118	7*d*.	Coathupe, H. B.—Timekeepers.
2119	1*s*. 6*d*.	Mennons, M. A. F.—(*A communication from P. L. T. Thier.*)—Propelling and steering ships, &c.
2120	7*d*.	Jones, R. W.—Heating and ventilating Turkish baths.
2121	3*d*.	Clark, J.—Envelopes, &c.
2123	10*d*.	Nye, G.—Apparatus for administering injections.
2124	3*d*.	Lechêne, A., and Nathan, C.—Ladies' collars, cuffs, &c.
2125	9*d*.	Field, J. L.—Construction and application of armour plates.
2126	3*d*.	Tolhausen, F.—(*A communication from A. Denis and A. Mottet.*)—Artificial fur.
2127	3*d*.	Tolhausen, F.—(*A communication from J. B. T. Rousse.*)—Dynamic electricity.
2128	3*d*.	Haddan, J. C., and Minasi, C.—Projectiles and cartridges.
2129	3*d*.	Newton, W. E. — (*A communication from H. N. Fryatt.*)—Filtering, decolorizing, and rectifying.
2130	9*d*.	Attwood, H.—Cleansing and feeding boilers.
2131	3*d*.	Colburn Z.—Steam engines.
2132	10*d*.	Peltier, E.—Metallic boxes.
2133	3*d*.	Patureau, L. M. F.—Thread-protecting clew boxes.
2134	3*d*.	Smith, J., and Smith, W.—Spindles and flyers.
2135	10*d*.	Azémar, J. C. C.—Instrument for facilitating the practice of the drum.
2137	3*d*.	Johnson, J. H. — (*A communication from J. I. Morel and J. Lirondelle.*)—Dampers for stamping purposes.
2138	3*d*.	Brooman, R. A.—(*A communication from J. Paty.*)—Temples for looms.
2139	7*d*.	Hart, J. M., and Lavender, R.—Handles or knobs for locks and latches, &c.
2140	3*d*.	Granger, A.—Shirt collars and fronts, wristbands, &c.
2141	7*d*.	Ronald, J.—Dressing hemp, flax, &c.
2142	9*d*.	Browne, B.— (*A communication from H. E. Roeder.*)—Precipitating mineral substances.
2143	1*s*. 1*d*.	Guinness, W. S.—Sewing machines.
2144	3*d*.	Bray, T.—Ornamenting wood.
2145	3*d*.	Carpenter, S.—Carriage wheels.
2146	3*d*.	Duncan, J.—Manufacture of sugar, &c.
2147	3*d*.	Theiler, M.—Type-printing telegraphs.
2148	7*d*.	Corbett, S.—Mills for crushing and grinding mineral and vegetable substances, &c.
2149	3*d*.	Harding, J.—Inverness cape.
2150	3*d*.	Love, J.—(*A communication from R. Harvey.*)—Signal.
2151	3*d*.	Janvier, V. A.—Fastenings for gloves, belts, &c.
2152	9*d*.	Jewell, P.—Concertinas.

LIST of SPECIFICATIONS—*continued.*

No.	Price.	Name of Patentee and Subject-Matter.
2153	10*d.*	NEWTON, A. V.—(*A communication from A. H. Wright.*)—Cleaning rice, &c.
2154	3*d.*	PENROSE, R.—(*A communication from J. Peace.*)—Screw stocks and dies.
2155	3*d.*	OWEN, L. D.—(*A communication from M. Buck.*)—Ploughs.
2156	6*d.*	SHAW, R.—Windlasses, capstans, &c.
2157	3*d.*	DAUMONT, A. J.—Umbrella.
2158	3*d.*	PLUCHART, S.—Beverage.
2159	4*d.*	JAILLE, A.—Manure.
2160	3*d.*	GEDGE, W. E.—(*A communication from J. F. Düssol.*)—Thrashing machines.
2161	3*d.*	SPENCER, H. W.—Refining animal oils.
2162	9*d.*	MATTHEWS, J. S.—Starch.
2163	7*d.*	HARRIS, J.—Stopping or retarding railway and other carriages, &c.
2164	3*d.*	LECAUDEY, H.—(*A communication from R. Maleville.*)—Succouring interred persons.
2165	3*d.*	WORMS, C., and WARBURTON, J.—Treating animal fibre recovered from rags.
2166	9*d.*	BISHOP, J.—Weaving velvet, &c.
2167	3*d.*	BRAND, H.—Spring mattresses.
2168	6*d.*	CLARK, W.—(*A communication from Madame Sénéchal, formerly M. E. Guébin.*)—Shirts and chemises.
2169	3*d.*	HENSMAN, W., and HENSMAN, W., the younger.—Tilling land.
2170	3*d.*	KEACH, H.—Ornamentation of woven and other fabrics for garments, &c.
2171	9*d.*	TAYLOR, P.—Removing sediment from and preventing incrustation in steam boilers.
2172	10*d.*	JONES, T. M.—Roasting apparatus.
2173	3*d.*	SOUTHWOOD, W.—Boots and shoes.
2174	1*s.*	PEMBERTON, C.—Railway, ship, and other signals.
3175	3*d.*	COPPLE, J., and COPPLE, E.—Preventing the overwinding of mine ropes.
2176	3*d.*	HUGHES, E. J.—(*A communication from E. Langen.*)—Collecting gases from furnaces.
2177	5*d.*	JONES, J.—Clasps or fastenings for garments, belts, harness, &c.
2178	3*d.*	GILBEE, W. A.—(*A communication from J. Paulis.*)—Manufacture of steel.
2179	9*d.*	DUNLOP, J. M.—Cleansing cotton seeds, &c.
2180	6*d.*	FOX, W.—(*A communication from G. E. Charageat.*)—Parasols and umbrellas.
2181	3*d.*	SIEMENS, C. W.—(*Partly a communication from W. Siemens.*) Apparatus for indicating the temperature of coils of electric cable, &c.
2182	3*d.*	CURTIS, F.—Boot tops.
2183	3*d.*	GORANSSON, G. F.—Tyres for railway wheels, &c.
2184	7*d.*	STOCK, T. S., STOCK, J. S., and TAYLOR, H.—(*A communication from A. Hill.*)—Tap or stop-cock.

*** Specifications will be forwarded by post on receipt of the amount of price and postage (the latter rarely exceeding One Penny). Sums exceeding 5*s.* must be remitted by Post Office Order, made payable at the Post Office, Holborn, to Mr. Bennet Woodcroft, Great Seal Patent Office.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234 -	A.D. 1852—October to December inclusive
247 -	A.D. 1853—January to March ,,
268 -	,, April to June ,,
291 -	,, July to September ,,
321 -	,, October to December ,,
345 -	A.D. 1854—January to March ,,
371 -	,, April to June ,,
399 -	,, July to September ,,
424 -	,, October to December ,,
451 -	A.D. 1855—January to March ,,
475 -	,, April to June ,,
505 -	,, July to September ,,
527 -	,, October to December ,,
553 -	A.D. 1856—January to March ,,
579 -	,, April to June ,,
605 -	,, July to September ,,
632 -	,, October to December ,,
660 -	A.D. 1857—January to March ,,
684 -	,, April to June ,,
712 -	,, July to September ,,
737 -	,, October to December ,,
761 -	A.D. 1858—January to March ,,
789 -	,, April to June ,,
815 -	,, July to September ,,
842 -	,, October to December ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632 -	A.D. 1852—October to December inclusive
660 -	A.D. 1853—January to March ,,
684 -	,, April to June ,,
712 -	,, July to September ,,
737 -	,, October to December ,,
761 -	A.D. 1854—January to March ,,
789 -	,, April to June ,,
815 -	,, July to September ,,
842 -	,, October to December ,,

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Note.—The Commissioners' publications may be consulted daily at the Patent Museum, South Kensington; in the Library of the British Museum; in the Library of the Society of Arts; and in the Free Libraries of the following Towns and Cities:—

Aberdeen (*Public Library, Mechanics' Institution*).
Accrington (*Mechanics' Institution, Bank Street*).
Belfast (*Harbour Office, Corporation Square*).
Beverley (*Guildhall*)
Birmingham (*Birmingham and Midland Institute, Cannon Street*).
Blackburn (*Town Hall*).
Bolton-le-Moors (*Public Library, Exchange Buildings*).
Bradford, Yorkshire (*Borough Accountant's Office, Corporation Buildings, Swain Street*).
Brighton (*Town Hall*).
Bristol (*City Library, King Street*).
Burnley (*Office of the Burnley Improvement Commissioners*).
Cambridge (*Free Library, Jesus Lane*).
Canterbury (*Municipal Museum, Guildhall Street*).
Carlisle (*Public Free Library, Police Office*).
Chester (*Town Hall, Northgate Street*).
Cork (*Royal Cork Institution, Nelson Place*).
Crewe (*Railway Station*).
Darlington (*Mechanics' Institute, Skinnergate*).
Dorchester.
Drogheda.
Dublin (*Royal Dublin Society, Kildare Street*).
Dundalk.
Falmouth (*Public Library, Church Street*).
Gateshead (*Mechanics' Institute*).
Gorton (*Railway Station*).
Glasgow (*Stirling's Library, Miller Street*).
Grimsby, Great (*Mechanics' Institution, Victoria Street*).
Halifax.
Hanley, Staffordshire Potteries (*Town Hall*).
Hartlepool, West (*Literary and Mechanics' Institution, Church Street*).
Hertford (*Free Public Library, Town Hall*).
Huddersfield (*Commissioners' Offices, South Parade*).
Hull (*Mechanics' Institute, George Street*).
Ipswich (*Museum Library, Museum Street*).
Keighley (*Mechanics' Institute, North Street*).
Kidderminster (*Public Free Library Public Buildings, Vicar Street*).
Kings' Lynn, Norfolk (*Stanley Library, Athenæum*).
Lancaster (*Mechanics' Institute, Market Street*).
Leamington Priors (*Public Library, Town Hall*).
Leeds, *Town Clerk's Office* (*Town Hall*).
Leicester (*Corporation Library, Town Hall*).
Limerick.
Liverpool (*Free Public Library, Duke Street*).
——— (*Royal Institution*).
London (*British Museum*).
——— (*Society of Arts, John Street, Adelphi*).
Macclesfield (*Useful Knowledge Society*).
Maidstone.
Manchester (*Free Library, Camp Field*).
Montrose.
Newark, Nottingham (*Mechanics' Institute, Middle Gate*).
Newcastle-upon-Tyne (*Literary and Philosophical Society*).
Newport, Monmouth (*Commercial Room, Town Hall*).
Northampton.
Norwich (*Free Library, St. John's, Maddermarket*).
Nottingham (*Corporation Rooms, St. Peter's Church side*).
Oldham (*Town Hall*).
Oxford (*Public Free Library Town Hall*).
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B. WOODCROFT.

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B. WOODCROFT.

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No. 863. FRIDAY, APRIL 11, 1862. Price 2d.

Applications for Letters Patent.

(*8th, 9th, and 10th April*, 1862.)

990. William Steven, of Glasgow, in the county of Lanark, North Britain, Brickmaker and Builder, for an invention of "Improvements in apparatus for moulding or shaping clay for bricks or other like articles."—Dated 8th April, 1862.

991. James Brown, of Aldgate, in the city of London, Chemist, for an invention of "Improvements in protecting the bottoms and sides of ships and other entirely or partially submerged surfaces."—Dated 8th April, 1862.

992. William Beardmore, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in steam rams for naval purposes."—Dated 8th April, 1862.

993. Hugo Levinstein, of No. 2, Pinners Court, Old Broad Street, in the city of London, for an invention of "Lustering silk."—Dated 8th April, 1862.

994. John Whitehouse, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in the manufacture of metallic door and other knobs, and the ornaments of the pillars of metallic bedsteads and other articles of like manufacture, and in attaching metallic mounts to china or earthenware knobs and ornaments and roses for knobs."—Dated 8th April, 1862.

995. The Honourable William Edward Fitz Maurice, of 12, Hyde Park Gate, in the county of Middlesex, for an invention of "An improved construction of plating for ships' batteries and other structures used for war or other purposes."—Dated 8th April, 1862.

996. Charles Pemberton Carter, of Kennington Hall, near Ashford, in the county of Kent, for an invention of "An instrument for inserting photographic or other pictures into or removing them from between the 'mounts' of photographic albums or other flat spaces into which the fingers cannot be inserted."—Dated 8th April, 1862.

997. Frederick William Brearey, of No. 53, Cornhill, in the city of London, for an invention of "Improvements in medicated cups or vessels for drinking purposes."—Dated 8th April, 1862.

998. Edward Henry Cradock Monckton, of 5, Thurloe Place, South Kensington, in the county of Middlesex, Esquire, for an invention of "Improvements in timekeepers."—Dated 8th April, 1862.

999. John Jaques, junior, of the firm of John Jaques and Son, of 102, Hatton Garden, in the county of Middlesex, for an invention of "Improvements in the instruments used in the game of croquêt."—Partly the result of a communication from abroad made to him by William Fowler Mountford Copeland, residing at Madeira, and partly of invention and discovery made by himself."—Dated 8th April, 1862.

1000. Benjamin Sharpe, of Hanwell Park, in the county of Middlesex, for an invention of "Improvements in harrows and rakes."—Dated 8th April, 1862.

1001. Howard Ashton Holden, of Birmingham, in the county of Warwick, Merchant, and Charles Weekes, of the county of the borough of Carmarthen, Civil Engineer, for an invention of "Improvements in apparatus used in drawing water or other fluids from cisterns, tanks, or other vessels."—Dated 8th April, 1862.

1002. Edward Barnard Sampson, of Ham Mills, Stroud, in the county of Gloucester, for an invention of "Improvements in apparatus for supplying oil or other liquid to wool, as the same is fed into carding engines."—Dated 8th April, 1862.

1003. John Lawson, one of the partners in the firm of Samuel Lawson and Sons, of the Hope

Foundry, Leeds, in the county of York, for an invention of "Improvements in balling cotton and thread."—A communication to him from abroad by Adolphe Alphonse Poullier, a person resident at Lille, in the empire of France.—Dated 8th April, 1862.

1004. James Wright, of 42, Bridge Street, Blackfriars, city of London, Civil Engineer, for an invention of "Improvements in joining together armour and other thick metal plates, beams, and girders."—Dated 8th April, 1862.

1005. Thomas Cobley, Metallurgist, and James Wright, Civil Engineer, both of 42, Bridge Street, Blackfriars, in the city of London, for an invention of "Improvements in the method of, and the apparatus for, treating auriferous and argentiferous minerals and ores for the purpose of extracting and separating the gold and silver from the other metals, minerals, and substances combined therewith, also in the method of treating the various residues resulting therefrom, and in the utilization, application, and use of the said residues when so treated."—Dated 8th April, 1862.

1006. Samuel Rodgett, of Blackburn, in the county of Lancaster, Foreman, for an invention of "Certain improvements in power looms for weaving."—Dated 9th April, 1862.

1007. James Edward Hyde Andrew, of Audenshaw, in the county of Lancaster, Machinist, for an invention of "Improvements in looms for weaving."—Dated 9th April, 1862.

1008. Squire Farron, of Ashton-under-Lyne, in the county of Lancaster, Watch Maker, for an invention of "Improvements in machinery or apparatus for regulating the supply of steam from the boiler to the cylinder or pipes of steam engines, which improvements are also applicable to gases or fluids."—Dated 9th April, 1862.

1009. George Hollinshed, of Salford, near Manchester, in the county of Lancaster, Designer, for an invention of "Improvements in sandwich cases and similar articles."—Dated 9th April, 1862.

1010. James Bullough, Manufacturer, and John Bullough, Machinist, both of Baxenden, near Accrington, in they county of Lancaster, for an invention for "Improvements in looms for weaving."—Dated 9th April, 1862.

1011. William Taylor, of Oldham, in the county of Lancaster, Cotton Spinner, for an invention of "Certain improvements in machinery or apparatus for preparing and spinning cotton or other fibrous materials."—Dated 9th April, 1862.

1012. William Davies, of Llanelly, Carmarthenshire, South Wales, for an invention of "Improvements in puddling, balling, and reheating furnaces."—Dated 9th April, 1862.

1013. Josiah Jones, junior, of Ship Yard, Sefton Street, Liverpool, in the county of Lancaster, for an invention of "Improvements in constructing and arming ships and vessels."—Dated 9th April, 1862.

1014. John Langston, of North Street, Strood, in the county of Kent, for an invention of "Improvements in the manufacture of Portland cement."—Dated 9th April, 1862.

1015. Colin Mather, of Willow Bank, Broughton, near Manchester, in the county of Lancaster, Gentleman, for an invention of "Improvements in spittoons."—Dated 9th April, 1862.

1016. John Knowelden, of Southwark, in the county of Surrey, Engineer, for an invention of "Improvements in steam, water, and other fluid engines."—Dated 9th April, 1862.

1017. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved apparatus for raising and forcing water and other liquids."—A communication to him from abroad by Abel Brear, of Sangatuck, county of Fairfield, state of Connecticut, United States of America.—Dated 9th April, 1862.

1018. William Mays, of Joseph Street, Back Road, Shadwell, in the county of Middlesex, Miller, for an invention of "Improvements in machinery for grinding corn, grain, and other substances."—Dated 9th April, 1862.

1019. Robert Theyson, of Hanover, for an invention of "Improvements in cork cutting machinery."—Dated 9th April, 1862.

1020. Edward Funnell, of 54, East Street, Brighton, in the county of Sussex, Watch and Clock Manufacturer, for an invention of "A self-acting indicator signal for railways."—Dated 10th April, 1862.

1021. Daniel Fryer, of Carlton Square, Old Kent Road, county of Surrey, and William James Williams, of Arundel Street, Strand, London, county of Middlesex, Gentleman, for an invention of "Improvements in the method of and apparatus for letting on and cutting off the supply of gas to groups or districts of streets and other lamps from a central point or depôt."—Dated 10th April, 1862.

1022. William Armitage, of the city of Manchester, in the county of Lancaster, Manufacturer, for an invention of "Improvements in looms for weaving."—Dated 10th April, 1862.

1023. William Nunn, of 179, Saint George Street, at the parish of St. George's in the East, London, and in the county of Middlesex, for an invention of "Improvements in the construction of lanterns for ships and signals."—Dated 10th April, 1862.

1024. John Houghton, of No. 70, Foster Lane, Cheapside, in the city of London, for an invention of "An improved haversack."—Dated 10th April, 1862.

1025. Alexander Black, of Banbridge, in the county of Down, Ireland, Law Clerk, for an invention of "Improvements in swing bridges adapted for crossing lines of railways and other ways."—Dated 10th April, 1862.

1026. John Lillywhite, of Seymour Street, Euston Square, in the county of Middlesex, Cricketing Outfitter, and Thomas Nixon, of Chelford, in the county of Chester, Cricketer, for an invention of "An improved bowling apparatus for cricket balls, to be called 'the balista.'"—Dated 10th April, 1862.

1027. Cowper Phipps Coles, of Southsea, in the county of Hants, Captain Royal Navy, for an

invention of "Improvements in masts for ships." Dated 10th April, 1862.

1028. George Dirs Mertens, of 5, Royal Crescent, Margate, in the county of Kent, Gentleman, for an invention of "Improvements in the preparation of materials to be employed in the making of beer, and in the machinery or apparatus employed therein."—A communication to him from abroad by Charles Theodore Aulhorn, of Dippoldswalde, in the kingdom of Saxony.—Dated 10th April, 1862.

1029. Louis Christoph, of Paris, in the empire of France, William Hawksworth, of Linlithgow, North Britain, Steel Manufacturer, and Gustavus Palmer Harding, of Paris, Merchant, for an invention of "Improvements in drawing metals, and in the machinery or apparatus employed therein."—Dated 10th April, 1862.

1030. Henry Deacon, of Appleton House, Appleton, in the county of Lancaster, Alkali Manufacturer, for an invention of "Improvements in the manufacture of caustic soda."— Dated 10th April, 1862.

1031. John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, William Richardson, of the same place, Mechanical Engineer, and William Holland, of Salford, in the said county, Cotton Spinner, for an invention of "Improvements in carding engines."—Dated 10th April, 1862.

1032. John Petrie, junior, of Rochdale, in the county of Lancaster, Ironmonger, for an invention of "Improvements in machinery or apparatus for blowing and exhausting air."—Dated 10th April, 1862.

1033. George Burge, of Albert Road, Regent's Park, in the county of Middlesex, Contractor, for an invention of "An improved means of protecting forts, ships, and other structures and places against projectiles and other striking bodies."—Dated 10th April, 1862.

1034. Charles Bartholomew, of Broxholme, Wheatley, near Doncaster, Civil Engineer, and John Heptinstall, of Masbrough, near Rotherham, both in the county of York, for an invention of "Improvements in making circular blooms such as are used in the manufacture of tyres and for other purposes."—Dated 10th April, 1862.

1035. Osborne Reynolds, of Dobach, near Woodbridge, in the county of Suffolk, Clerk, for an invention of "Improvements in building ships and other vessels."—Dated 10th April, 1862.

1036. Thomas Barnabas Daft, of 2, Queen Square, Westminster, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in coverings for the feet."—Dated 10th April, 1862.

1037. William Fox, of Amiens, in the empire of France, for an invention of "Improvements in the manufacture of brooms and brushes."—Dated 10th April, 1862.

1038. Andrew Trimen, of No. 9, Adam Street, Adelphi, London, in the county of Middlesex, for an invention of "The protection and solidification of magnesian limestone and other stones, and for the prevention of the passage of water through the same."—Dated 10th April, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

3241. To Peter Armand le Comte de Fontaine-Moreau, of No. 4, South Street, Finsbury, London, Patent Agent, for the invention of "Improvements in treating fatty and resinous bodies either in a neutral or acid state."—A communication from Charles Monier, a person resident at St. Ouen, Paris.

On his petition, recorded in the Office of the Commissioners on the 27th day of December, 1861.

249. To William Davies, of Elizabeth Place, Old Bethnal Green Road, in the county of Middlesex, Pattern Maker, for the invention of "Improvements in apparatus for cutting corks and bungs."

On his petition, recorded in the Office of the Commissioners on the 30th day of January, 1862.

311. To Adam Carlisle Bamlett, of Middleton Tyas, near Richmond, in the county of York, Farmer, for the invention of "Improvements in reaping and mowing machines."

On his petition, recorded in the Office of the Commissioners on the 6th day of February, 1862.

415. To Arthur Henry Harrison, of 16, Park Place, Highbury, in the county of Middlesex, for the invention of "An improved under-garment for gentlemen and ladies' wear."

On his petition, recorded in the Office of the Commissioners on the 15th day of February, 1862.

478. To James Peterkin Douglas Camp, of the International Patent Agency, 100, Fleet Street, in the city of London, for the invention of "Improvements in the arrangement of valves for steam and other engines, and in the means of operating the same."—A communication to him from abroad by Henry Steele, of Jersey city, state of New Jersey, United States of America.

On his petition, recorded in the Office of the Commissioners on the 22nd day of February, 1862.

507. To Carlo Minasi, of No. 3, Saint James's Terrace, Kentish Town Road, in the county of Middlesex, Professor of Music, for the invention of "Improvements in cartridges, and in apparatus for facilitating the proper aiming with fire arms."

On his petition, recorded in the Office of the Commissioners on the 25th day of February, 1862.

533. To Thomas Adams, of Deptford, in the county of Kent, Engineer, for the invention of "Improved arrangements for effecting an equilibrium of the steam pressure upon valves, the said arrangements being also applicable for effecting equilibrium of fluid or gaseous pressure upon other valves."

On his petition, recorded in the Office of the Commissioners on the 27th day of February, 1862.

625. To John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for the invention of "Improvements in

machinery or apparatus for cleaning cotton from seeds."

On their petition, recorded in the Office of the Commissioners on the 8th day of March, 1862.

656. To Olivier Kerautret and Jules Kerautret, of No. 15, Passage des Petites Ecuries, in the city of Paris and empire of France, for the invention of "Improvements in the construction and ornamentation of buildings, by the use of which hewn stone and faced bricks are dispensed with in some parts thereof."

659. And to Thomas Barnes Wilson, of Queen's Ferry, in the county of Flint, and William Wilson, of Preston, in the county of Lancaster, both Managers, for the invention of "Improvements in means or apparatus for the splitting of cane and other fibrous substance."

On both their petitions, recorded in the Office of the Commissioners on the 11th day of March, 1862.

665. To Alexander James Russell, of Edinburgh, in Scotland, Clerk to the Signet, for the invention of "Improvements in the arrangement of the electric conductors for submarine telegraphs."—A communication to him from abroad by Francis Bensa and Windham Charles James Anstruther, of Florence, in Italy.

676. And to Frederick Tolhausen Civil Engineer and Patent Agent, of No. 17, Rue du Faubourg Montmartre, Paris, for the invention of "An improved kind of spinning or humming top."—A communication to him from Jean Marie Charles Martin, Esq., a person resident at No. 12, Rue Neuve des Martyrs, Paris.

On both their petitions, recorded in the Office of the Commissioners on the 12th day of March, 1862.

718. To James Hunter, of Coltness Iron Works, Cambusnethan, in the county of Lanark, North Britain, Ironmaster, and Robert Scott, of the same place, Engineer, for the invention of "Improvements in reaping machines."

On their petition, recorded in the Office of the Commissioners on the 15th day of March, 1862.

735. To Brereton Todd, of Bissoe and Perran Smelting Works, near Falmouth, in the county of Cornwall, for the invention of "Improvements in the manufacture of antimony and the oxide of antimony."

On his petition, recorded in the Office of the Commissioners on the 17th day of March, 1862.

773. To Bernhard Samuelson, of Banbury, in the county of Oxford, Agricultural Engineer, for the invention of "Improvements in chain harrows."

775. To Albert Hill, of Cheddar, in the county of Somerset, Stay Manufacturer, for the invention of "An improved fastening for stays."

777. To Edwin Smith, of Sheffield, in the county of York, Sculptor, for the invention of "Improvements in means or apparatus for, cutting stone, wood, and other material, which improvements are also applicable to modelling in plastic material."

779. To William Baddeley, of Angel Terrace, Islington, in the county of Middlesex, Civil Engineer and Patent Agent, for the invention of "An improved method of preparing tobacco for smoking, and in the apparatus to be used for that purpose."—A communication to him from abroad by Charles Hoppe, of Cologne, in Germany.

781. And to John George Thompson, of Madras, in the East Indies, now residing at Porchester Place, in the county of Middlesex, Gentleman, for the invention of "Improvements in pianofortes, organs, harmoniums, and other instruments having key boards."

On their several petitions, recorded in the Office of the Commissioners on the 20th day of March, 1862.

783. To Robert Kay, of Castleton Print Works, Blue Pits, in the county of Lancaster, Calico Printer, for the invention of "Certain improvements in the method of printing calico and other surfaces, and in apparatus connected therewith."

785. To James Newall, of Bury, in the county of Lancaster, Railway Carriage Builder, for the invention of "Improvements in supplying gas to railway carriages, stations, steamboats, and other vessels, omnibuses, or other carriages, at any required pressure, and in apparatus connected therewith."

786. To John Matthias Hart, of 76, Cheapside, in the city of London, and Robert Lavender, of 332, Goswell Road, both in the county of Middlesex, for the invention of "Improvements in means for generating steam."

787. To James Fawcett, of Wakefield, in the county of York, Corn and Fulling Miller, for the invention of "Improvements in the manufacture of soap, particularly applicable to the scouring, cleansing, and fulling of woollen or other cloths."

789. To Brownlow Hugh Matthew, of Saint James', in the county of Middlesex, Lieutenant Royal Bombay Engineers, for the invention of "Improvements in fire-arms and in cartridges."

791. And to James Warbrick and William Warbrick, Machine Makers, and Alfred Travis, Foreman, all of 'Furnace Hill Iron Works,' Dukinfield, in the county of Chester, for the invention of "Improvements in engines for carding cotton and other fibrous materials."

On their several petitions, recorded in the Office of the Commissioners on the 21st day of March, 1862.

793. To David Abercrombie, Mechanic, in the employment of Messieurs Alexander Paul and Company, of Glasgow, in the county of Lanark, North Britain, for the invention of "Improvements in power looms."

795. To Toni Fontenay, of Grenoble, France, Civil Engineer, for the invention of "Improvements in smoke consuming furnaces."

797. To Edward Lord, of Todmorden, in the county of York, Machine Maker, for the invention of "Improvements in certain machines for preparing cotton and other fibrous substances."

799. To Robertson Gladstone, of Court-Hey, Broad Green, in the county of Lancaster, Merchant, for the invention of "Certain improvements in tilting or tipping waggons."

801. To Joseph Henry Tuck, of No. 35, Cannon Street, in the city of London, for the invention of "Improvements in the manufacture of flexible valves."

803. To Thomas Mosdell Smith, of High Street, Kensington, in the county of Middlesex, for the invention of "Improvements in the manufacture of candles."

805. And to William Holiday, of the Union Foundry, Bradford, in the county of York, Engineer, for the invention of "Improvements in the manufacture of press plates."

On their several petitions, recorded in the Office of the Commissioners on the 22nd day of March, 1862.

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808. To John Henry Brierley, of Beech Hill Mills, Halifax, in the county of York, for the invention of "An improved clasp or fastener for reversible belts, bands, or straps."

809. To John Clarke, of Shiffnal, in the county of Salop, Manufacturer, for the invention of "An improvement or improvements in carriage axles."

811. To Samuel Ellison Turner, of Birkenhead, in the county of Chester, for the invention of "An improved apparatus for burning a mixture of inflammable gas and air."

812. To Charles Marien Roullier, of Paris, in the French empire, Manufacturer, for the invention of "Improvements in flat cables or chains."

813. To Benjamin Fleet, of East Street, Walworth, in the county of Surrey, Soda Water Manufacturer, for the invention of "Improvements in apparatus for manufacturing and bottling soda water."

815. To Edmund Morewood, of Stratford, in the county of Essex, and Andrew Whytock, of Little St. Andrew Street, St. Martin's Lane, in the county of Middlesex, for the invention of "Improvements in the process of coating metals, and in the apparatus employed."

816. And to William Henson, of Great Alfred Street, Nottingham, in the county of Nottingham, Engineer, for the invention of "Improvements in knitting machinery."

On their several petitions, recorded in the Office of the Commissioners on the 24th day of March, 1862.

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819. To Echlin Molyneux, junior, of Seaview, Enniskerry, in the county of Wicklow, Ireland, for the invention of "Improvements in air, gas, and vapour engines."

820. To Amherst Hawker Renton, of 14, Royal Avenue Terrace, Chelsea, in the county of Middlesex, Civil Engineer, and Edward Cottam, of Pimlico, in the county of Middlesex, Engineer, of the firm of Robinson and Cottam, for the invention of "Improvements in apparatus for steering ships."

821. To Walter Beaumont, Lieutenant 33rd Lancashire Rifle Volunteers, and John William Edge, Gun and Rifle Manufacturer, both of Manchester, in the county of Lancaster, for the invention of "Improvements in sights for rifles."

823. To Albert Marcius Silber, of the firm of Silber and Fleming, of Wood Street, in the city of London, Merchants, for the invention of "An improved fastening for purses, pocket books, bags, and other articles."—A communication to him from abroad by Johann Georg Klein, of Offenbach, in Germany.

825. To Edmund Morewood, of Stratford, in the county of Essex, and Andrew Whytock, of Little St. Andrew Street, St. Martin's Lane, in the county of Middlesex, for the invention of "Improvements in the manufacture or shaping of iron or other material."

826. To William Palmer, of Sutton Street, Clerkenwell, in the county of Middlesex, for the invention of "Improvements in lamps."

827. To Charles Culling, of Downham Market, in the county of Norfolk, Gunmaker, for the invention of "Improvements in fire-arms."

829. And to John Thomas Loft, of Brooklyn, New York, United States of America, but now residing at Berwick Street, Pimlico, in the county of Middlesex, Architect, for the invention of "Improved machinery for covering strips of metal and wire."

On their several petitions, recorded in the Office of the Commissioners on the 25th day of March, 1862.

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831. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in apparatus for cleaning tubes and flues of steam boilers and similar conduits."—A communication to him from abroad by Claude Dumas, of Paris, in the empire of France.

833. To James Parker, of Huddersfield, in the county of York, Engineer, for the invention of "Improvements in steam engines, and in apparatus connected therewith."—The result partly of a communication from abroad made to him by Bernhard August Schäffer, of Magdeburg, in the kingdom of Prussia, and partly of invention and discovery made by himself.

835. To Henry Nunn, of Chelsea, in the county of Middlesex, Whitesmith, for the invention of "Improvements in the construction of mangles."

837. To James Boothman, of Gisburn, near Skipton, in the county of York, Farmer, for the invention of "Improvements in bee hives and apparatus connected therewith."

839. And to Henry Carr, of No. 4, Victoria Street, Westminster, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in applying lubricating fluids to the journals of railway carriages and locomotive engines."

On their several petitions, recorded in the Office of the Commissioners on the 26th day of March, 1862.

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842. To Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the invention of "An improved process of, and apparatus for separating the fibres of wood, flax, hemp, and other vegetable substances, and extracting the coloring matters therefrom."—A communication to him from abroad by Azel Storrs Lyman, of New York city, United States of America.

852. And to Jeanne Louise Henriette Clémence Comtesse de Vernede de Corneillan, of Paris, in the French empire, for the invention of "Improvements in treating open cocoons of silkworms, and in converting the waste resulting therefrom into paper."

On both their petitions, recorded in the Office of the Commissioners on the 27th day of March, 1862.

862. To James Jones, of Mersey Bank, Warrington, in the county of Lancaster, Engineer, for the invention of "Improvements in apparatus for raising and forcing liquids."

868. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in chaff cutters."—A communication to him from abroad by Auguste Bernard Albaret, of Paris, in the empire of France, Mechanician.

870. And to Robert Lublinski, of 183 and 185, City Road, London, E.C., Stick Manufacturer, for the invention of "An improved method of jointing crutch hooks on umbrellas or walking canes."

On their several petitions, recorded in the Office of the Commissioners on the 28th day of March, 1862.

872. To John Boucher, of No. 3, Surrey Villas, Camberwell New Road, in the county of Surrey, Gentleman, for the invention of "Improvements in rifled ordnance and fire arms, and in the projectiles to be used therewith."

878. To William Glass, of 37, Princes Street, Stamford Street, Lambeth, in the county of Surrey, for the invention of "Improvements in the treatment of sulphuret of antimony and in obtaining products therefrom."

880. To William Paterson, of Glasgow, in the county of Lanark, North Britain, Manufacturing Chemist, for the invention of "Improvements in the manufacture of iodine."

882. To John Baker, of Devonshire Grove, Old Kent Road, in the county of Surrey, Manufacturing Cook and Confectioner, for the invention of "Improved alimentary preparations."

884. And to John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for the invention of "Improvements in carding engines."

On their several petitions, recorded in the Office of the Commissioners on the 29th day of March, 1862.

886. To John Clinton, of 35, Percy Street, Tottenham Court Road, in the county of Middlesex, Professor of Music, for the invention of "Improvements in flutes."

888. To John Jordan, of Liverpool, in the county of Lancaster, Engineer and Surveyor of Iron Ships, for the invention of "Improvements in the construction of armour plated vessels or other like structures."

892. To William Henry Hook, of Walworth, in the county of Surrey, for the invention of "Improvements in folding envelopes and paper, and in machinery or apparatus employed therein."

894. To William Barry Lord, of Plymouth, in the county of Devon, Veterinary Surgeon, Royal Artillery, and Frederic Hughes Gilbart, of Brixton, in the county of Surrey, Gentleman, for the invention of "An improved hame slip for suddenly releasing horses and other cattle from their harness, also applicable for releasing heavy bodies or weights."

896. To Richard Burley, of Lower Thames Street, in the city of London, Iron and Brass Founder, for the invention of "An improved material for forming or lining the bearings of axles and shafts, and other rubbing parts of machinery."

898. To Robert Nightingale, of Maldon, in the county of Essex, Artist, for the invention of "Improvements in markers, butts, or mantelets."

900. To John Harding, of Beeston Manor Iron and Coal Works, Leeds, in the county of York, Engineer and Iron Master, for the invention of "Improvements in the application of the waste heat arising from coke ovens for heating air for blast furnaces, also for calcining ironstone and other minerals, and for heating and smelting iron."

902. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in rotatory engines."—A communication to him from abroad by Wilhelm Heinrich Christian Voss, of Berlin, in the kingdom of Prussia, Engineer.

904. And to William McIntyre Cranston, of 58, King William Street, in the city of London, for the invention of "Improvements in machinery for cutting corn and other crops."—A communication to him from abroad by James Smith Thayer, a person resident at New York City, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 31st day of March, 1862.

908. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the manufacture of manure."—A communication to him from abroad by Mr. Leopold Engène Lavigne, of 29, Boulevart St. Martin, Paris, in the empire of France, Civil Engineer.

912. To Frederick Knudsen, in the employ of M. F. Dent, of 33 and 34, Cockspur Street, Charing Cross, in the county of Middlesex, for the invention of "Improvements in chronometers."

914. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in machinery or apparatus for spinning cotton and other fibrous substances."—A communication to him from abroad by James Eaton, of Boston, in the state of Massachusetts, United States of America.

916. To Henry Walton Whitehead, of the firm of Taylor, Wordsworth, and Co., of Leeds, in the county of York, Machine and Tool Makers, and George Bray, of Leeds, aforesaid, Carding Engineer, for the invention of "Improvements in machinery for carding wool and other fibrous substances."

918. To John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for the invention of "Improvements in mules for spinning and doubling."

920. And to John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, for the invention of "Improvements in

machinery or apparatus used for applying motive power derived from bullocks, horses, or other animals."

On their several petitions, recorded in the Office of the Commissioners on the 1st day of April, 1862.

922. To William Currie Harrison, of 15, Sutherland Place, Pimlico, in the county of Middlesex, Civil Engineer, and Henry John Standly, of 20, Cockspur Street, Westminster, in the county of Middlesex, Esquire, for the invention of "An improved instrument or tool for boring or drilling holes in slate or other rock."

924. To The Reverend George Scratton, of Stickney, in the county of Lincoln, Clerk, for the invention of "Improvements in shades or blinds for windows."

926. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in memorandum pocket and other books, and in pencil and pen holders to be used therewith."—A communication to him from abroad by Eugene Recordon, of Vaison, Vaneluse, France.

928. To Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for the invention of "Improvements in bits for taming or subduing vicious horses and breaking colts."—A communication to him from abroad by Aurelius Langdon, Weymouth, of Boston, Massachusetts, United States of America.

930. To Bewicke Blackburn, of York Buildings, Adelphi, in the county of Middlesex, for the invention for "Improvements in apparatus for lubricating locomotive and other axles."

932. To Thomas Moore, of No. 33, Regent Circus, Piccadilly, in the county of Middlesex, for the invention of "Improvements in winding apparatus especially applicable to fishing lines, nets, and log-lines, and in leaders or travellers to be used therewith, which leaders or travellers are also applicable to working ships' sails, and other useful purposes."

936. And to William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the manufacture of carbonic acid."—A communication to him from abroad by Messrs. Louis Joseph Frédéric Margueritte, and Alfred Lalouël de Sourdeval, both of 29, Boulevart St. Martin, Paris, Chemists.

On their several petitions, recorded in the Office of the Commissioners on the 2nd day of April, 1862.

940. To George Bower, of Ashton-under-Lyne, in the county of Lancaster, Ironmoulder, and John Qualter, of Dukinfield, in the county of Chester, Blacksmith, for the invention of "Certain improvements in metallic pistons."

942. To George Hunter, of Coleford, in the county of Gloucester, Engineer, for the invention of "Improvements in machinery and tools for cutting, sawing, and planing stone, marble, and slate."

944. To William Kemp, of 20, Spital Square, and Thomas Cowley, of Harts Lane, Bethnal Green, both in the county of Middlesex, for the invention of "Improvements in the manufacture of silk pile velvet."

946. To David Wilson, of Wandsworth Common, in the county of Surrey, and Edward Alfred Cowper, of No. 35A, Great George Street, Westminster, for the invention of "Improvements in presses for pressing cotton, fibrous materials and hay."

948. To Alexander Mann, of Tottenham, in the county of Middlesex, for the invention of "Improvements in photographic apparatus."

950. And to Henry Thomas Hassall, of the firm of Hassall and Co., of Birmingham, in the county of Warwick, Manufacturers, and Michael Burke, of Liverpool, in the county of Lancaster, Cabinet Maker, for the invention of "Improvements in reclining or invalids' chairs, and in swinging or ships' chairs."

On their several petitions, recorded in the Office of the Commissioners on the 3rd day of April, 1862.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

11th April, 1862.

2565. Corneille Wynants, of Saint Josse-ten-Noode, in the kingdom of Belgium, Engine Builder, for an invention of "An improved chase for printing presses." — Dated 15th October, 1861.

2567. William Ross, of Glasgow, in the county of Lanark, North Britain, Brass Founder, for an invention of "Improvements in constructing taps or valves."—Dated 15th October, 1861.

2568. John Gilbert, of Church Street, Old Kent Road, in the county of Kent, Engineer, for an invention of "Improvements in endless railways." —Dated 15th October, 1861.

2580. William Smith, of Salisbury Street, Adelphi, Civil Engineer for an invention of "Improvements in the apparatus for and method of increasing the illuminating power of gas."—A communication to him from abroad by Hugo Carstaujen, of Cologne.—Dated 17th October, 1861.

2586. Charles De Groote, Shorthand Writer, of the city of Brussels, in the kingdom of Belgium, for an invention of "An improved instrument for corking bottles and other vessels."—Dated 17th October, 1861.

2591. William Croome, of Kilmersdon, Radstock near Bath, in the county of Somerset, Surgeon, for an invention of "Improvements in lamps."—Dated 18th October, 1861.

2598. Charles Herbert Holt, of Huddersfield, in the county of York, Engineer, for an invention of "Improvements in steam engines and boilers, and in apparatus connected therewith, part of which improvements is also applicable to raising and measuring fluids generally."— Dated 18th October, 1861.

2599. William Streather, of Raunds, in the county of Northampton, Builder, for an invention of "Improvements in the construction of wind engines, and in the structure containing the same, parts of which are applicable in the construction of windmills."—Dated 18th October, 1861.

2606. Charles Cheyne, of 19, Great George Street, Westminster, Civil Engineer, and Thomas Beeby Moseley, of Lewisham, in the county of Kent, for an invention of "Improvements in the construction of apparatus for signalling on railways, by which improvements the signalling apparatus is rendered self registering or recording, and also applicable for measuring and recording the speed of passing trains and the time of their passage, part of which improvements is applicable for recording the speed of trains where signalling is not required."—Dated 18th October, 1861.

2609. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "A new or improved manufacture of titanic pig metal, or alloy of titanium and iron."—Dated 19th October, 1861.

2610. Théophile Lepeinteur, of Paris, in the empire of France, Glove Manufacturer, for an invention of "Improvements in fastenings for gloves, belts, and other articles."—Dated 19th October, 1861.

2633. John Toward, of the Glasshouse Bridge Iron Works, Newcastle-upon-Tyne, Engineer, for an invention of "Improvements in armour plates for ships, and in securing the same to the sides of a vessel."—Dated 21st October, 1861.

2637. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "An improvement or improvements in the manufacture of a certain metallic alloy." — Dated 22nd October, 1861.

2649. Joseph Felix Victor Deliry, of the town of Soissons, in the empire of France, Baker, for an invention of "An improved mechanical kneading trough."—Dated 23rd October, 1861.

2650. Augustin Morel, of Roubaix, in the department du Nord, and empire of France, Manufacturer, for an invention of "A new machine for combing all filamentous materials."—Dated 23rd October, 1861.

2684. William Robertson, of the city of Manchester, Engineer, and John Muir Hetherington, of the Vulcan Works, in the city of Manchester, Machine Maker, for an invention of "Certain improvements in mules for spinning and doubling."—Dated 26th October, 1861.

2728. Alfred Topham, Joseph Topham, and Jabez Topham, all of St. Pierre-les-Calais, in the empire of France, Lace Manufacturers, for an invention of "Improvements in the manufacture of lace."—Dated 30th October, 1861.

3101. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improvements in jack machinery for moving heavy bodies." — A communication from Félix Winand, a person resident at Goffontaine, Fraipont, in the kingdom of Belgium. —Dated 11th December, 1861.

23. Hermann Eschwege, of 14, Mincing Lane, in the city of London, for an invention of "Improvements in treating wood and other vegetable spirit."—Dated 2nd January, 1862.

81. Thomas Ramsay, of the town and county of Newcastle-upon-Tyne, Coal Owner, for an invention of "Improvements in the manufacture of coke."—Dated 11th January, 1862.

138. William Louis Winans, of Baltimore, Maryland, United States of America, but now residing at Brighton, in the county of Sussex, and kingdom of England, Civil Engineer, for an invention of "Improvements in the manner of mounting, and apparatus for manœuvring, cannon or ordnance on ships or vessels of war and floating batteries."—Dated 18th January, 1862.

273. John Hill, of 212, Piccadilly, county of Middlesex, Travelling Equipage Maker, for an invention of "Improvements in the construction of portable chairs and other articles for sitting or reclining on, road, children's and invalid carriages, ambulances, or vehicles for carrying sick or wounded persons."—Dated 1st February, 1862.

Patents which have become Void.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 50*l.*, before the Expiration of the Third Year from the date of such Patents, pursuant to the Act of the 16 Vict. c. 5, sec. 2, for the week ending the 5th day of April, 1862.

813. Daniel Kinnear Clark, of 11, Adam Street, Adelphi, in the county of Middlesex, Civil Engineer, for an invention of "Feed water heating apparatus."—Dated 1st April, 1859.

814. Frederic Philippe Auguste Auburtin, of Paris, in the empire of France, at present residing at No. 32, Gerard Street, Islington, in the county of Middlesex, for an invention of "An improved preparation of food for herbivorous animals."—Complete specification.—Dated 1st April, 1859.

818. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in cricket bats."—A communication from abroad by Michael Doherty, of Boston, in the United States of America."—Dated 1st April, 1859.

819. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved process of manufacturing sulphate of lead, carbonate of lead, nitrate of potash, and sulphate of soda." — A communication from Samuel Cooper, of Boston, in the United States of America.—Dated 1st April, 1859.

821. William Tod, of Glasgow, in the county of Lanark, North Britain, Marine Engineer, for an invention of "Improvements in marine steam engines."—Dated 1st April, 1859.

822. Yves-Marie-Thomas, of 2, Rue Sainte-Appoline, Paris (empire of France), and of 45, Essex Street, Strand, London, for an invention of "An improved propeller for ships, vessels, boats, and water-wheels."—Dated 1st April, 1859.

824. Abraham Ripley, of Bridge Street, Blackfriars, London, county of Middlesex, Engineer, and John Roberts, of Nelson Square, Bermondsey, county of Surrey, Engineer, for an invention of "Improvements in machinery for striking or scraping leather and tanned or untanned hides."—Dated 2nd April, 1859.

833. Thomas Richardson, of Hartlepool, in the county of Durham, Engineer, and George William Jaffrey, of the same place, Engineer, for an invention of "Improvements in the arrangement and construction of harbours of refuge, breakwaters, sea walls or barriers, and other like structures."—Dated 2nd April, 1859.

834. Thomas Williams, of Aberdaron, in the county of Caernarvon, Engineer, and John Hobson Fuller, of 70, Hatton Garden, in the county of Middlesex, Tool Manufacturer, for an invention of "Improvements in screw stocks and dies."—Dated 2nd April, 1859.

840. James Henry Burton, of Enfield Lock, in the county of Middlesex, for an invention of "Improvements in the manufacture of barrels for small fire-arms."—Dated 4th April, 1859.

843. Champion Russell, of Stubbers, near Romford, in the county of Essex, Esquire, for an invention of "An improvement in the working of marine engines."—Dated 4th April, 1859.

844. Matthew Augustus Crooker, of New York, United States of America, Engineer, for an invention of "Improvements in paddle wheels for steamers."—Dated 4th April, 1859.

848. Andrew Shanks, Engineer, of No. 6, Robert Street, Adelphi, Westminster, for an invention of "Certain improvements in machinery for forging and stamping metals."—Dated 5th April, 1859.

849. George Haseltine, of the United States of America, now of 4, Southampton Building, Holborn, in the county of Middlesex, for an invention of "Improvements in sewing machines."—Dated 5th April, 1859.

852. Frederick Collier Bakewell, of No. 6, Haverstock Terrace, Hampstead, in the county of Middlesex, for an invention of "Improvements in open fire-places."—A communication from abroad by Calvin Dodge, of Pittsburgh, North America. —Dated 5th April, 1859.

855. John Etherington, of Manchester, in the county of Lancaster, Machinist, and Thomas Webb and James Craig, of Tutbury, in the county of Derby, Cotton Spinners, for an invention of "Improvements in machinery or apparatus for spinning and doubling cotton and other fibrous materials."—Dated 5th April, 1859.

857. Nicolas Libotte, Mechanician, of 33, Boulevart S. Martin, Paris, (empire of France,) for an invention of "An improved safety apparatus to be applied to cages in the drawing of coals."—Dated 5th April, 1859.

858. Francis Maltby Crichton, of Stoke Abbey' Stoke Bishop, in the parish of Westbury-upon-Frym, in the county of Gloucester, Gentleman, for an invention of "Improvements in clocks or time-keepers."—Dated 5th April, 1859.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 100*l.*, before the Expiration of the Seventh Year from the date of such Patents, pursuant to the Act of the 16 Viet. c. 5. s. 2, for the week ending the 5th day of April, 1862.

729. Frederick Phillips, of the Hall Farm, Downham, near Brandon, in the county of Suffolk, Land Agent, for an invention of "Improvements in machinery or apparatus for effecting the working and cultivation of land."—Dated 2nd April, 1855.

737. François Theodore Botta, of Paris, Brewer, for an invention of "Improvements in the method of and apparatus for beer brewing."—Dated 3rd April, 1855.

742. Hiram Powers, of Florence, in Tuscany, Sculptor, for "An invention for performing perforations or throats to the cutting edges of files or rasps, for allowing the particles cut away to pass through, and to prevent the instrument from clogging or choking."—Dated 3rd April, 1855.

748. Henry Richardson Fanshawe and John Americus Fanshawe, of North Woolwich, in the county of Essex, Manufacturing Agents, for an invention of "Certain improvements in the manufacture of waterproof fabrics of the vulcanized, sulphurized, or cured class."—Dated 3rd April, 1855.

749. Frederick Joyce, of Upper Thames Street, in the city of London, Percussion Cap Manufacturer, for an invention of "Improvements in the manufacture of percussion caps and other primers." —Dated 3rd April, 1855.

752. Christopher Nickels, of the Albany Road, in the county of Surrey, and James Hobson, of Leicester, for an invention of "Improvements in weaving pile fabrics when wires are used."—Dated 3rd April, 1855.

755. Louis Ambroise Michel Mouchel, of Paris, in the empire of France, and of 166, Fleet Street, London, Merchant, for an invention of "An improved method of joining pipes, tubes, and ducts." — A communication. — Dated 4th April, 1855.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.
234 -	A.D. 1852—October to December inclusive
247 -	A.D. 1853—January to March ,,
268 -	,, April to June ,,
291 -	,, July to September ,,
321 -	,, October to December ,,
345 -	A.D. 1854—January to March ,,
371 -	,, April to June ,,
399 -	,, July to September ,,
424 -	,, October to December ,,
451 -	A.D. 1855—January to March ,,
475 -	,, April to June ,,
505 -	,, July to September ,,
527 -	,, October to December ,,
553 -	A.D. 1856—January to March ,,
579 -	,, April to June ,,
605 -	,, July to September ,,
632 -	,, October to December ,,
660 -	A.D. 1857—January to March ,,
684 -	,, April to June ,,
712 -	,, July to September ,,
737 -	,, October to December ,,
761 -	A.D. 1858—January to March ,,
789 -	,, April to June ,,
815 -	,, July to September ,,
842 -	,, October to December ,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632 -	A.D. 1852—October to December inclusive
660 -	A.D. 1853—January to March ,,
684 -	,, April to June ,,
712 -	,, July to September ,,
737 -	,, October to December ,,
761 -	A.D. 1854—January to March ,,
789 -	,, April to June ,,
815 -	,, July to September ,,
842 -	,, October to December ,,

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Cape of Good Hope, No. 727.
Ceylon, No. 648.
Cuba, No. 498.
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Germany, No. 435.
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Netherlands, No. 289.
Newfoundland, No. 858.
New South Wales, No. 386.
New Zealand, 861.
Norway, No. 665.
Prussia, Nos. 313 and 329.
Parma, Piacenza, and Guastalla, No. 321.
Portugal, No. 325.
Poland, No. 335.
Queensland, No. 386 and 859.
Roman States, No. 319.
Russia, Nos. 334 and 508.
Sardinia, Nos. 233, 235, 636, 637, 639, and 640.
Saxony, No. 236.
Sicilies (the Two), No. 316.
Spain, No. 323.
Sweden, Nos. 327 and 354.
Tasmania, No. 860.
United States of America, Nos. 638, 646, and 789.
Victoria, Nos. 186 and 359.
Wurtemberg, No. 314.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s.*

EXTENSION OF PATENTS TO THE COLONIES. Abstract of Replies to the Secretary of State's Circular Despatch of January 2, 1853, on the subject of the Extension of Patents for Inventions to the Colonies. Second Edition, with revised Table, 1861. Price 2*s.*

FOREIGN PATENTS.



UNITED STATES OF AMERICA.

(Communicated by the Commissioner of Patents.)

LIST of PATENTS, with Claims annexed, issued from the United States Patent Office, for the week ending 18th February, 1862, and each bearing that date.

No. 34,399. JAS. C. ADAMS, of Baltimore, Maryland, for an "Improvement in combined house, bridge, boat, and wagon body."

"I claim the within described house or its equivalent, which can be converted into the uses herein set forth."

No. 34,400. JOHN S. BARDEN, of New Haven, Conn., for an "Improvement in crank and cross head connection for steam engines."

"I claim the combination and arrangement of the flanches *o*, *o*, grooves *i*, *i*, and rail bearings *k*, *l*, *m*, with the three friction rollers and the cross head A, the whole being applied to a crank and a piston rod, and to operate substantially as set forth. I also claim the combination of the semi-tubes F, G, with the rollers when applied, and to operate within a rail A, as described."

No. 34,401. CHARLES H. BURGESS, of Landwich, Mass., for an "Improvement in doors for reverberatory and other furnaces."

"I claim constructing the doors of reverberatory and other furnaces, with the water space herein described, in combination with the arrangement of the pipes essentially as herein set forth."

No. 34,402. MILLS L. CALLENDER, of New York, N. Y., for an "Improvement in hydro-carbon burners."

"I claim, first, the relative arrangement of the cone *d*, and the interior deflector I, with its shield *b*, for the purpose of burning hydro-carbon oils, with or without a chimney, in the manner above specified. Second, I claim a burner so constructed as to increase the length of its metallic connection between the body of the lamp and the wick-tube, without adding materially to its height, using for that purpose the spiral coil B, B^1, on which the cone *d* was mounted. Third, I claim the new and cheap method of forming the levers *s*, s^1, from the metal of which the body of the burner itself is constructed, by which means the springs to hold the chimney in position and the body of the burner are made simultaneously from one piece of metal."

No. 34,403. PAUL CASAMAJOR, of New York, N.Y., for an "Improved apparatus for making vinegar."

"I claim, 1st, the method of creating an artificial draft by inspiration or suction, substantially as described, and for the purpose set forth. 2nd, the rotary apparatus substantially as described and for the purpose set forth."

No. 34,404. J. CLARK and D. FRENCH, of Syracuse, N. Y., for an "Improved composition for pavements, roofing and other purposes."

"We claim the within described composition substantially as and for the purposes set forth."

No. 34,405. MORTIMER C. COGSWELL and ADDISON G. WILLIAMS of Buffalo, N. Y., for an "Improvement in grain dryers."

"We claim, 1st, the double head *c*, having an air chamber c^1, and hollow journal D, for the purposes and substantially as herein described. 2nd, we claim the combination of the double head *c*, with perforated distributing air tubes F, for the purposes and substantially as described. 3rd, we claim the combination of the double head *c*, hollow journal D, distributing air pipes F, and lifting buckets I, with the case A, for the purposes and substantially as herein set forth."

No. 34,406. JAMES COLLINS, of Farmington, Illinois, for an "Improvement in cultivators."

"I claim, 1st, the combination of the perpendicular draft rods *f*, f^1, depending from the transverse bar *a*, a^1, and braces *h*, *h*, extending back from the lower part of the said draft rods to the axle tree, all constructed and arranged as described and for the purposes stated. 2nd, I claim the combination of the clevis *g*, and draft rods *f*, *f*, when constructed and operating as and for the purposes set forth. 3rd, the crank levers *k*, k^1, and adjusting nuts *x*, constructed and arranged in connection with a corn plow on wheels in the manner and for the purposes set forth. 4th, the combination of the cross bar *a*, a^1, raft rods *f*, f^1, braces *h*, h^1, clevis *g*, adjusting levers *k*, k^1, and *p*, p^1, curved axle tree *e*, e^1, and seat *m*, all substantially as and for the purposes set forth."

No. 34,407. HANNAH D. CONRAD, of Dayton, Ohio, for an "Improvement in setting and threading needles in sewing machines."

I claim, 1st, in combination with a sewing machine, the improved needle threader and setter described, pivoted or hinged to the needle arm or bar, or to the needle bar socket. 2nd, And in combination with the improved needle threader and setter, pivotted or hinged as described, I claim the stop *k*, for the purposes set forth. 3rd, in combination with the funnel F, I claim the screw J, for adjusting the eyes of needles of different sizes opposite the termination of the funnel."

No. 34,408. EDWARD T. COVELL, of New Bedford, Mass., for an "Improvement in lamps."

"I claim placing the slitted deflector *d*, over the wick tubes *g* and *f*, for the purpose of enabling my said lamp to produce a flat flame from a tubular wick, substantially as represented in the accompanying drawings, but this I only claim when air is permitted to flow through the space within the wick tube *g*, for the purpose of aiding in the production of a more perfect combination than has ever before been produced in an oil lamp. When a slitted deflector is placed over the tubular wick of a lamp, I also claim supporting the said deflector in such a manner that it can be turned to any desired position independently of the wick-tubes of said lamp, substantially as herein set forth."

No. 34,409. HENRY CRAIG, of Cleveland, Ohio, for an "Improvement in microscopes."

"I claim the lens E, when constructed as herein set forth."

No. 34,410. A. B. DAVIS and THOS. CROOK, jr., of Philadelphia, Pa., for an "Improvement in corn shellers."

"We claim the angular strip *a*, on the wheel K, arranged in respect to the stripper wheels L and L^1, substantially as set forth, for the purpose specified."

No. 34,411. G. B. DAVIS, of Chicago, Illinois, for an "Improvement in water filters."

"I claim, 1st, the tub or pail A, divided into two compartments C, D, by a horizontal partition or false bottom B, in combination with the filter case G, perforated at its side or sides, provided with an internal perforated cone *d*, and fitted or arranged on the false bottom B, to operate substantially as and for the purpose set forth. 2nd, the combination of the partition or false bottom B, in tub A, filter case G, cocks E, K, and air tube J, when all are arranged substantially as and for the purpose specified. 3rd, the combination of a double-walled tub or pail A, with the false bottom B, and filter case G, arranged as shown to form a combined filter and cooler, as set forth."

No. 34,412. FRANCIS DELUCE, of Boston, Massachusetts, for an "Improved centering implement."

"I claim the implement for drilling central holes constructed and operating substantially as set forth. Also, in

combination with the said improvement, the means described, or the equivalent thereof, for changing the relative position of the drill.

No. 34,413. Augustus Destouy, of New York, N.Y., for an "Improvement in sewing machines."

"I claim in a machine provided with a table or support for the material to be sewed to rest upon, and a feeding and thread controlling device. I claim the combination of the following elements constituting a sewing mechanism adapted to the manufacture of boots and other like articles; viz. an awl and a forked needle, the former for piercing the material, and the latter to carry the under thread through it, and a stationary thread case and a rotating hook, the former for holding the upper thread, and the latter to seize and carry the under thread loop over and around the thread case, so as to lock in the thread fed out from said case, the whole being arranged substantially as described, to operate in the manner and for the purposes set forth."

No. 34,414. Wm. H. Devalin, of Sacramento, Cal., for an "Improvement in rotary engines."

"I claim the combination of the pistons H, boxes I, rods *g*, crossheads J, rollers *j*, cams K, *h*, and springs *i*, all constructed, arranged, and operating in the manner and for the purposes herein-before shown and explained."

No. 34,415. Joseph Dodin, of New York, N.Y., for an "Improvement in lamps."

"I claim the particular shape of the plate of metal combining the mode of locking together at A, and clasping the tube at *n*, substantially as described."

No. 34,416. James H. Doughty, of Adamsville, Ohio, for an "Improvement in churns."

"I claim the combination of the channels *i* and *k*, formed and arranged as described, when used in connection with the cylinder G, piston F[1], and valve J, arranged and operating substantially as and for the purposes set forth."

No. 34,417. Thaddeus Fairbanks, of St. Johnsbury, Vermont, for an "Improvement in platform scales."

"I claim the herein-before described application or arrangement of a fractional scale arm H, and a movable counter balance weight I, relatively to the scale beam, and to operate therewith substantially as specified. I also claim the arrangement of the superior lever C, and the post F, with respect to the stand or base of the platform of the scale."

No. 34,418. Henry Farmer, of Pontiac, Michigan, for an "Improvement in vegetable and root cutters."

"I claim, 1st, the use of the cylinder C, constructed in the manner and for the purpose herein specified. 2nd, the employment of the sections E, hinged and provided with knives *a*, *a*, as and for the purposes herein specified."

No. 34,419. Albert Fuller, of Cincinnati, Ohio, for an "Improvement in faucets."

"I claim, 1st, a faucet having an interior elastic tube, by the compression and expansion of which the flow of liquid may be regulated or prevented, substantially as described. 2nd, the application of the conoidal tube D to the elastic tube C, for the purpose of securing the latter, substantially as described."

No. 34,420. O. T. Gilman, of Washington, D.C., for an "Improvement in tools."

"I claim the employment of the claw C, in combination with hammer A, for forming three tools in one, substantially as specified."

No. 34,421. Elanson D. Gould, of Lockport, N.Y., for an "Improvement in channelling tools for harness makers."

"I claim a channelling tool, constructed substantially as described, with the sliding knife or knives *c*, *d*, and adjustable spring knife *e*, operating substantially in the manner herein set forth. I also claim constructing the knife *e*, with a segmental spring shank, in combination with the adjusting screw *n*, substantially as and for the purposes set forth."

No. 34,422. J. Durell Greene, of U.S. Army, for an "Improvement in breech-loading fire-arm."

"I claim the combination of the sliding and revolving plunger or breech plug I, with the rod K, when the hand lever L, by which the breech plug is revolved, is attached to the rod, as set forth."

No. 34,423. J. J. Hirschbuhl, of Louisville, Kentucky, for an "Improvement in military ammunition box."

"I claim the within described box, having an apartment E, for a powder flask and separate boxes B, C, D, attached to one side by hinges, so as to open outward for the reception of balls, percussion caps, and cartridges, when arranged in the manner and for the purpose described."

No. 34,424. William Hodgson, jr., of Philadelphia, Pa., for an "Improvement in the manufacture of graduated glass measure."

"I claim the forming of graduated glass measures, and the graduations thereon, at one operation in a press-mould, so constructed, marked and shaped, that all vessels made in the same mould will be precisely alike as regards form and capacity, and will have graduations so arranged in respect to that form and capacity, that the same accurate measurement may be made by all vessels alike, as herein set forth."

No. 34,425. Mark W. House, of Cleveland, Ohio, for an "Improvement in electric baths."

"I claim, 1st, the insulator J, for the support of the basket *b*, for the purpose described, in combination with the insulated rotating rods *f*, and traversing holes *e*, when arranged and operating as and for the purpose specified. 2nd, I claim the head plate C, when hinged to the insulator J, in such a manner that the distance between the plate and head of the patient can be increased or diminished for the purpose of concentrating or diffusing the electrical current through the part exposed to its action."

No. 34,426. George W. Howard, of Pontiac, Michigan, for an "Improvement in oil tanks."

"I claim constructing an oil tank with an open bottom, in combination with buoys or floats, substantially in the manner herein described, whereby the upper edge of the tank is always kept above the surface of the water, and the tank may readily be floated from place to place, or rise and fall with the tide, as herein described."

No. 34,427. Edgar Huson, of Ithica, N.Y., for an "Improved machine for raising carriages."

"I claim such a combination of the lever loop joints and ratchet for a carriage-jack, as that, when the weight is raised and the lever pressed down against the standard, the slide is supported and upheld without any fastening, by the support of the loop which falls outside the joint D."

No. 34,428. Thomas A. Jenkes, of Providence, R. I., for an "Improved waterproof fabric."

"I claim the fabric in which flocks or fibres, and india rubber or other allied gums, are combined with cloth or other base by means of pressure, so as to become integral portions of the new napped waterproof fabric, substantially as described, the same being a new manufacture."

No. 34,429. George R. Kelsey, of West Haven, Conn., for an "Improvement in the manufacture of buckles."

"I claim a buckle in which the bow and loop is made of one piece of wire, when the ends of the cross bar (*c*) are clinched around the opposite parts (*a* and *b*) of the bow and loops (to strengthen the buckle), as herein described."

No. 34,430. Rhodolphus Kinsley, of Springfield, Mass., for an "Improvement in tompion for fire-arms."

"I claim, 1st, a tompion, consisting of a wooden pin, split in two parts throughout a portion of its length, and having a spring of metal, rubber, or other suitable substance inserted between these two parts to force them against the bore of a gun, substantially in the manner and for the purpose herein described. 2nd, forming the pin or shank part of the tompion smaller at the middle than at each end, for the purpose and in the manner substantially as herein set forth."

No. 34,431. A. Kline, of Philadelphia, Pa., for an "Improved match safe."

"I claim the match safe (A), having its lid (B) applied and arranged to operate in relation to the same in the modes described and set forth, for the purpose specified."

No. 34,432. Iverson W. Knapp, of New York, N.Y., for an "Improvement in bakers' ovens."

"I claim combining with the fire-chamber of the mechanical bake-oven known as the 'reel oven,' a flue or passage way, provided with a suitable damper, leading from the fire-chamber to the chimney, and so arranged with relation to the perforated baking chamber containing the reel and bread pans, as to conduct smoke, gases, &c. (heretofore allowed to pass into the baking chamber) directly from the fire-chamber to the chimney, substantially as described."

No. 34,433. Thomas S. Lambert, of Peekskill, N.Y., for an "Improvement in camp stoves."

"I claim the combination of the sectional cylinders with the draft pipes or flues C, D, H, constructed as described, and with the smoke flue and cover, substantially as set forth."

No. 34,434. Richard S. Lawrence, of Hartford, Conn., for an "Improvement in forging apparatus."

"I claim an auxiliary weight and belt combined with the pulley or drum of a drop, or with the belt or strap, or other appliance used to raise the drop weight, for the purpose set forth."

No. 34,435. John Le Ferre, of Charlestown, Mass., for an "Improved metal for sheathing ships."

"I claim a sheet of copper or of copper alloy, coated with tin, substantially as set forth."

No. 34,436. Jacob Longyear, of Grass Lake, Michigan, for an "Improved boring machine."

"I claim the arrangement of the independently adjustable carriage bars I, I, with the carriage L, adjustable stop M, and the series of boring bits H, H, H, all as herein shown and described."

No. 34,437. Henry Lyon, of Brooklyn, N.Y., for an "Improved cork sole for boots and shoes."

"I claim the improved waterproof cork sole made from fine or granulated cork, as set forth in this specification."

No. 34,438. M. M. Mackerley, of South Salem, Ohio, for an "Improved corn planter and lime spreader combined."

"I claim the box F, the plough N, the valve D, the box H, the eccentric Q, the connecting rod *c*, pins *e*, *e*, vales I, box J, and dog *f*, the whole to be constructed and arranged with respect to each other, substantially in the manner described for the purpose specified."

No. 34,439. Almeron Mc Kenney, of Maumee, Ohio, for an "Improvement in grubbing machines."

"I claim, 1st, the employment of the hollow axle A, constructed as specified and provided with the flanges *a*, *a*, and projections *b*, *b*, as and for the purpose specified. 2nd, the employment of the wheels B, B, and the hollow lever C, as constructed and used in connection with the hollow axle A, for the purpose specified. 3rd, the combination of the ratchet hooks G, G, the ratchet wheels E, E, the lever C, the bars J, J, and counterbalance K, constructed and arranged as specified. 4th, the metallic jaw *e*, provided with flanges, and a slot for longitudinal adjustment when bolted to the lever, as and for the purpose specified. 5th, the employment of the clevis constructed in the manner described, and used with the axle provided with lugs, as and for the purpose specified. 6th, the employment of the bolt *i*, with eccentrics and handle in connection with the lever and ratchet hooks, to prevent the wheels from becoming locked too soon, substantially as herein specified."

No. 34,440. David L. Miller, of Madison, N.J., for an "Improved elevating machine."

"I claim the worm screw K, and manner of arranging the boxes *f*, *g*, of the same, so that it can be easily disengaged from the worm wh[illegible] J, in combination therewith, and with the windlass L, draft chain *i*, box frame I, inclined strut G, and brace H, platform A, and longitudinal beams *a*, *a*[1], *b*, *b*[1], the whole mounted upon wheels, and arranged in the manner and for the purpose set forth."

No. 34,441. Joseph Miller, of Paris, Ohio, for an "Improvement in horse rakes."

"I claim, 1st, the arrangement of the protuberances K, K[1], straps or chains *i*, *j*, rollers M, spur N, and stops L, in connection with the foot levers I, J, to facilitate the elevation, depression, and holding down of the rake as herein-before explained. 2nd, the combination of the standard G, seat H, and vertical foot-levers I, J, the levers being mounted upon the standard G, the latter secured to the axle A, and all arranged in the manner and for the purposes shown and explained."

No. 34,442. Charles R. Morehouse, of Cardington, Ohio, for an "Improvement in rat traps."

"I claim, 1st, the arrangement of the rod G, springs (*d*, *d*,) plate (I), and trigger (J), as and for the purpose specified. 2nd, the arrangement of the doors *c*, *c*, the bars H, H, and the rod (G), in the manner and for the purpose herein specified."

No. 34,443. John Norton, of Rosherville, England, for an "Improvement in mode of splitting stumps of trees, timber, &c."

"I claim the general system or mode of splitting stumps of trees or large blocks of timber by the aid of cartridges of percussion powder as herein-before described."

No. 34,444. James Old, of Pittsburgh, Pa., for an "Improvement in pumps for deep wells."

"I claim the use of a hollow piston rod or pipe extending through the lowest valve as well as through the upper valve or plunger of pumps, and furnished with a valve at top of the hollow piston rod or gas pipe, constructed and arranged substantially as described for the purpose of allowing of the escape of gas or fixed air from the bottom of deep wells, without interfering with the operation of the valves of the pump. 2nd, also the combination of a hollow piston rod for the plunger of a pump passing through all the valves of the pump cylinder, with a flexible tube and valve at the top of the hollow piston rod, constructed substantially as and for the purpose herein-before described. 3rd, also the use of a check valve seated in the pump chamber, directly above and in addition to the ordinary upper and lower pump valves, for the purpose of sustaining and relieving the plunger of the pressure of the column of oil or other liquid in the pump tube above the valves, when there is a partial vacuum in the pump chamber on the up-stroke of the plunger. 4th, also the use of an air vessel attached to the piston rod of a pump for the purpose of checking the too rapid descent of the plunger, and of keeping up the upward flow of the column of water, oil, or other liquid in the pump tube above the valves, during the descent of the plunger, substantially as herein-before described."

No. 34,445. Caleb H. Packard, of North Bridgewater, Mass., for an "Improved clothes wringer."

"I claim in a wringing machine whose upper elastic roller is supported in a rocker frame, the arrangement of the springs K, K, between the feet B, B, and the arms *c*, *c*[1], in combination with so constructing and applying the rocker frame that its upper end or arms *f*, *f*[1], may both be elevated at the same time, or either of them, as may be desirable, whereby the said springs and rollers are caused to operate substantially in manner as set forth."

No. 34,446. Oscar Paddock, of Watertown, N.Y., for an "Improvement in operating dampers in stoves."

"In combination with a stove when the same is provided with two upright pipes C, C[1], communicating with and sustaining horizontal flues arranged in relation to each other, substantially as herein described, I claim the arrangement of the valves J, J[1], operating within the said pipes, so as to open and close simultaneously by means of connecting rods, or their equivalents, for the purposes herein set forth."

No. 34,447. Wm. H. Pierce, of East Cambridge, Mass., for an "Improvement in guards for lanterns."

"I claim the band or ring C, as constructed and applied to the ribs C, and made to operate therewith, substantially in manner and for the purpose set forth."

No. 34,448. James S. Rankin, of Madison, Indiana, for an "Improved school desk."

"I claim building the frame work of a series of school desks on a continuous central wooden joist or beam I, running fore and aft, the desks and joist being mutually framed into each other, substantially as herein set forth."

No. 34,449. B. F. Skinner and A. Plummer, jr., of Mystic Bridge, Conn., for an "Improvement in breech loading fire-arms."

We claim, 1st, the arrangement of the eccentric axis of the swinging breech in a position oblique to the axis of the bore or barrel, substantially as and for the purpose herein specified. 2nd, the combination of the needle bolt or hammer F, with its spring G, enclosed in the swinging breech B, with the slide J, and trigger *h* and I, in the frame A, or their equivalents, operating substantially as herein described. 3rd, though we do not claim broadly setting up the breech of a breech-loading fire-arm by means of a screw, we claim the employment for setting up the breech of a screw D, which also serves as one of two centres on which the breech swings to open and close, substantially as and for the purpose herein specified."

No. 34,450. Robert N. Stewart, of Philadelphia, Pa., for an "Improvement in gas burners."

"I claim, in combination with the plate B, arranged as described, the hinged cap C, and clearing plate D, constructed, combined, and arranged to operate substantially in the manner described and for the purpose specified."

No. 34,451. A. Stockwell and B. D. Humes, of Millbury, Mass., for an "Improvement in looms."

"We claim, 1st, the lever N, forced by a spring against the yarn on the beam, and connected with the slide bar L, by a link M. 2nd, the tension arm O, operated substantially as set forth. 3rd, the slide bar L, the rocker lever E, with its pawl and ratchet mechanism, the shaft D, the levers K, J, the movable worm C, and its gear, as applied to the yarn beam. We also claim the combination of the pawl U, and its rack, with the yarn delivering and taking-up mechanisms, constructed in manner and so to operate substantially as specified."

No. 34,452. Levi B. Tyng, of Lowell, Mass., for an "Improvement in railroad joints or chains."

"I claim a rail coupling constructed and consisting of a single piece, embracing the combination of features substantially as herein set forth, and its combination with railroad rails; that is to say, I claim a stiffening rib *o*, formed and constructed longitudinally in or upon the base of a rail coupling, composed of a single piece, having a spring bow to clasp the rail, base and jaws to clamp the rail stem and rivet or bolt thereto. I do not intend by this to limit my invention and claim to the particular form and construction of rib represented in the drawing, but to such form or forms and construction of rib as may be most convenient and will produce the same effect. I also claim the combination of the rigid jaws with a spring bow in the aforesaid rail coupling, substantially as herein set forth."

No. 34,453. Oliver C. Washburn, of Philadelphia, Pa., for an "Improved composition for making oilcloth."

"I claim the new mode of making coating paste for the manufacture of oil cloths in all their varieties, by a combination of carbonate of ammonia, white vitriol, boiled oil, and water, substantially as set forth."

No. 34,454. William Weitling, of New York, N.Y., for an "Improved stitch for button holes."

"I claim a stitchwork for edging and button holes, this stitchwork being a combination of three threads, by which combination the one thread, when passing through the cloth, loop checks the other, passing round the edge of the cloth, and both of these being loop-checked on the other side of the cloth by the thread of the shuttle, or of its equivalent, as within set forth."

No. 34,455. John W. Wilcox, of West Roxbury, Mass., for an "Improved mode of preventing corrosion of steam boilers, vats, tanks, &c."

"I claim so purifying the water as it passes from the condenser to the boiler of the steam engine as to free it from all metallic salts destructive to iron, in the manner substantially as described. Second, I claim the rupture or breaking of any galvanic or electric current that would otherwise exist between the steam boiler, and all other connecting steam or water fixtures that may be composed of metals that are electro-negative to iron, substantially in the manner and for the purposes set forth."

No. 34,456. Hosea Willard, of Vergennes, Vermont, for an "Improved clothes bar."

"I claim the construction of the bracket A, with a projecting shelf D, and stirrups *a*, substantially as herein shown and described, in combination with the bars B, whereby the inner ends of the bars B will bear against the shaft D, which will resist the weight placed upon the bars, and keep them in a horizontal position, all as set forth. The arrangement of the bars B, to fold towards and radiate from a common centre, in combination with the bracket A, as herein shown and described."

No. 34,457. S. D. Woodbury, of Lynn, Mass., for an "Improvement in camp stoves."

"I claim, first, forming the fire chamber of two sections of a conical or other tapering form that enables one section to be placed within the other, substantially in the manner and for the purpose described. Second, I do not claim making the funnel telescopic, so-called, or having the sections or joints slide into each other, as that has been done; but I claim forming a sectional stove pipe of tapering pieces, when said tapering pieces are susceptible of being dismembered from each other and from the stove itself, and the parts held together by the wedging of the pieces themselves when the stove-pipe is drawn out or erected, substantially as above described."

No. 34,458. J. W. Browne, of New York, N.Y., assignor to Jacob Mott Van Wagner, of Summit, N.J., for an "Improvement in weather strip moulding."

"I claim the new manufacture of improved weather strip moulding substantially as described."

No. 34,459. Elliot Dickerman, of Middlefield, Conn., assignor to Metropolitan Washing Machine Company, of Middletown, Conn., for an "Improvement in clothes wringing machines."

"I claim constructing the frame of a clothes wringer in two or more parts connected together in the manner of a vice or tongs, so as to form a movable jaw, operated at a point or points above the tub or vessel, and adapted to clamp the machine upon said tub or vessel, substantially in the manner herein above set forth."

No. 34,460. Erastus S. Bennett, of Brooklyn, N.Y., assignor to himself, James Thoubboron, and Lydia Brown, of same place, for an "Improvement in locks."

"I claim the bent or angular key hole formed substantially as shown, in combination with the divided key shank (*e*), connected by the universal joint (*f*), for the purposes specified."

No. 34,461. John Dillingham, of Turner, Maine, assignor to Jesse Follett, of same place, for an "Improved fender or sheath for boots and shoes."

"I claim, first, the connection or union of the covering for the upper leather and sole of the toe of the boot or shoe in one entire piece of metal or other substance, I do claim as novel, and therefore my improvement. Second, I also claim as novel the peculiar form of the sheath, whereby the covering for the upper and under leather of the shoe or boot is connected by a central flange to support it, therefore not liable to get out of place."

No. 34,462. H. P. Gengembre, of Tarentum, Pa., assignor to Geo. W. Howard, of Pontiac, Michigan, for an "Improved method of storing oils."

"I claim the method herein described of storing oils in order to prevent leakage from hydrostatic pressure. I also claim storing oils in tanks constructed with tight sides but open at bottom, and immersed in water, in order to relieve the sides thereof from hydrostatic pressure, substantially in the manner herein described."

No. 34,463. E. J. Hall, of Highgate, Vermont, assignor to himself and C. P. Stimets, of same place, for an "Improved spring castor."

"I claim the combination of a roller castor with a spiral spring or springs C, when the latter are suspended to a plate

b, resting or bearing loosely on a shoulder or bearing *a*, on the arbor B, to admit of the free rotation of the arbor without affecting the tension of the springs, as herein set forth."

No. 34,464. Thomas S. Lambert, of Peekskill, N.Y., assignor to Joseph S. Wright, of same place, for an "Improvement in the mode of constructing garments."

"I claim, first, the application of the elastic band to retain the garment in its proper position at the waist, in the manner set forth. Second, the application of the elastic band to retain the garment in the proper position at the neck in the manner set forth. Third, the making the garment of such proportions at the waist and neck as are set forth. Fourth, the application of the elastic cords in front, in combination with the fly, as set forth. Fifth, the combination of the elastic bands at the neck and waist, and the combination of the elastic bands at the neck, waist, and bottom of the garment, as set forth."

No. 34,465. Charles Kirk, of New Haven, Conn., assignor to Charles Monson and Stillman Moore, of same place, for an "Improvement in dry gas meters."

"I claim so constructing and operating a dry gas meter that the alternate expansion of the two apartments of the double bellows (while it measures the gas) will regulate the opening and closing of the valves which admit the gas alternately into the apartment to be measured, and (after being measured) allow it to pass out for use, when the whole is constructed, arranged, and fitted for use, substantially as herein described. 2nd, I claim the method of opening and closing the two pairs of valves by means of the valve rod (*i*), and the helical springs (*l* and *m*), when they are arranged, connected, and fitted to produce the result, substantially as herein described. 3rd, I claim the herein described method of registering the quantity of gas thus measured by the alternate expansion of the two apartments of the double bellows, by means of the slide and clog or hand, substantially as herein described. 4th, I claim the use of the additional bellows N, to counteract the varying pressure (in the main) when fitted to close its induction valve by its own expansion (and allow it to be opened by its contraction), substantially as herein described."

No. 34,466. Thomas Newcomb, of Kingston, Mass., and Charles C. Newcomb, of Warren, Maine, assignor to Thomas Newcomb, of Kingston, Mass., for an "Improved stump and rock extractor and elevator."

"We claim the above described improved arrangement of the detaching springs or devices K, K, with respect to the pawl bars G^1, H^1, and the brake I. We also claim the combination of the pulley hangers N, N, with the sprocket wheel D, the supporting frame B, and the mechanism for operating the sprocket wheel. We also claim the arrangement of the hanger or staple *a*, with respect to the sprocket wheel and its rotating machinery."

No. 34,467. Henry Newhouse, of Chicago, Illinois, assignor to N. S. Bouton, of same place, for an "Improvement in machines for cutting troist mouldings."

"I claim, 1st, the grooved wheel *a* with the switches or their equivalents, substantially as described. 2d, the knife holder B, constructed and operated substantially as described. 3rd, the knife shifters *b*, *b*, in combination with the knife holder, used in the manner and for the purpose specified. 4th, the combination of the cylinder C with the spiral grooves thereon, or their equivalents, for directing the knife, substantially as and for the purpose specified. 5th, the knife guide ring D with its guide *d*, in combination with the spiral grooves of cylinder C, as specified. 6th, the combination of the knife holder and its adjusting mechanism with wheel B, and the knife guiding mechanism, operating automatically as and for the purpose specified.

No. 34,468. Adam Oot, of Minetto, N.Y., assignor to himself and M. S. Clark, of same place, for an "Improvement in camp stoves."

"I claim making a portable stove in separate plates or sheets, attached together by staples and keys, so as to be readily taken apart and put together, substantially in the manner and for the purpose described."

No. 34,469. William E. Prall, of Maineville, Ohio, assignor to himself, Henry Eastman, and Warren A. Witham, of said Maineville, for "Improved evaporating pans for saccharine juices."

"I claim, 1st, a series of evaporating pans descending from the front of the furnace to the chimney, as herein shown and described. 2nd, in the described combination with a descending series of evaporating pans, the arrangement of side deflectors F, F^1, isolated from the fire, and communicating with the first and second evaporating pans, in the manner and for the objects stated. 3rd, while disclaiming the general use of guards or shields to protect heating surfaces from too intense or direct action of the fire, I claim the fenders O, when used in the described connection with a series of evaporating pans descending from the front toward the chimney."

No. 34,470. Jabez E. Walcott, of Boston, Mass., assignor to Wm. Hooper Blaekler, of same place, for an "Improvement in process of electroplating iron and other metals with copper."

"I claim the above described process of electroplating with copper, substantially as described."

No. 34,471. Norman W. Wheeler, of Brooklyn, N.Y., assignor to Simon Stevens, of Lancaster, Pa., for an "Improvement in traetermotive engines."

"I claim, 1st, the combination of the traction drum A, driving wheels B, B, and guide wheels C, C, C, C, substantially as and for the purposes described. 2nd, supporting the feed water tank E within the drum A, and upon the frame D, D, by means of the brackets R, R, the whole being arranged substantially as described."

Re-issue.

No. 1276. George Mallory, of Watertown, Conn., for an "Improvement in hoop skirts."—Letters Patent, dated October 19, 1858.

"I claim providing for the vertical flexure of one or more of the hoops of a skirt at the sides thereof by means of flexible pieces or their equivalents, operating substantially as and for the purpose herein specified."

Designs.

No. 1538. P. H. Drake, of Binghamton, N. Y., for a "Design for a bottle."

No. 1539. Jabez W. Hayes, of Newark, N. J., for a "Design for a trade mark on sword blades."

No. 1540. Victor Myer, of New York, N.Y., assignor to Alden Sampson and Sons, of Manchester, Me., for a "Design for floor cloths pattern."

No. 1541. George B. Owen, of New York, N.Y., for a "Design for a clock case."

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 25th February, 1862, and each bearing that date.

No. 34,472. Benjamin T. Babbitt, of New York, N.Y., for an "Improvement in the construction of ordnance."

"I claim the construction of a piece of ordnance with a passage *a*, winding spirally round the bore, and within the walls thereof, substantially as and for the purposes herein specified."

No. 34,473. N. Badger, of Shelbyville, Ky., for an "Improved digging machine."

"I claim the combination of the oscillating guides I, arms *d*, and crank G, with the cylinder F, as and for the purpose herein shown and described. I also claim the combination with the above parts of the pulverising rollers N, P, as shown and described."

No. 34,474. Louis Bail, of New Haven, Conn., for an "Improvement in construction of foundations for lighthouses, piers, &e."

"I claim constructing the foundations and other portions of lighthouses, coffer-dams, and other similar structures of cast iron segment plates A, provided at the inner or concave side with flanches a, a^1, to receive screw bolts c for the purpose of securing the plates together to form a cylinder, and then filling the cylinder with concrete, stone, or other suitable material, substantially as set forth."

No. 34,475. John L. Beers and Samuel Leonard, of Fayette, Pa., for an "Improvement in water wheels."

"We claim the concave chute F, arranged as described, in combination with the superincumbent penstock C, and the wheel A, substantially as and for the purpose set forth."

No. 34,476. Wm. H. Bliss, of Newport, R.I., for an "Improvement in hose couplings."

"I claim, 1st, connecting the nut D with the pin F by means of the divided collar E, fitted in the nut and to the pin, substantially as shown and described, when said connection is used in combination with the pin F and the groove g of butt B, for the purpose specified. 2nd, the lug G within the butt A, when used in connection with the pin F, and the groove g of the butt B, substantially as and for the purpose set forth."

No. 34,477. John Smith Briggs, of South Bend, Indiana, for an "Improvement in mode of starting street cars."

"I claim the application to street cars of friction drums and arms, in combination with spiral springs, for the purpose of acquiring and retaining power, in stopping the car, to start the same again, in the manner herein described."

No. 34,478. C. G. Case and J. M. Baker, of Battle Creek, Michigan, for an "Improvement in automatic machines for weighing grain."

"We claim the combination of the boxes C, C^1, discharge valves E, E, arms f, f, connecting rod g, with the valve k, passages i, j, and spring latches O, when arranged and operating in the manner and for the purpose set forth."

No. 34,479. H. Cassell and W. F. Semple, of Fredericktown, Ohio, for an "Improvement in bellows for blowpipes."

"We claim the chamber D acted upon by spring k, in combination with the chambers B and C, and air conveying tube or pipe I."

No. 34,480. Charles T. Chester, of New York, N.Y., for an "Improvement in alphabetical telegraphs."

"I claim, 1st, the use in alphabetical telegraphs of a train of wheels actuating an escape wheel, in connection with pallets actuated by electromotive force, when these parts are combined to operate an indicating needle, substantially in the manner set forth. 2nd, the handle or pointer, with its hollow shaft, ratchet wheel, toothed wheel, two springs, with adjustable points, combined substantially as described, and forming the transmitting apparatus. 3rd, the arrangement for combination of these two parts of the complete instrument, so that one dial answers for receiving and transmitting apparatus, and the parts may be instantly separated and examined, substantially as described."

No. 34,481. John Christy, of Baltic, Conn., for "Improved smoothing irons."

"I claim the handle E, bar G, gravitating catch i, latch projection j, and legs C, D, provided with feet c, d, in combination with the oblong mortise B, ledges a, b, and iron A, when arranged to operate in the manner ann for the purpose set forth."

No. 34,482. Charles B. Conant, of Hardwick, Mass., for an "Improvement in lifting jacks."

"I claim, 1st, the combination with the stand A, and screw C, of the boss or hub D, collar G, and internal projection a, substantially as and for the purposes set forth. 2nd, the combination with the screw C, and stand A, of stop or hub D, projection a, nut E, pawl J, guide collar G, holding collar K, and the pawl frame H, substantially as and for the purposes set forth."

No. 34,483. Suspended.

No. 34,484. Ephraim D. Foss, of Maineville, Ohio, for an "Improved evaporating pans for saccharine juices."

"I claim, 1st, the series of small equidistant apertures H, when used in the described combination with separate lever gates I, I, I, and all constructed and arranged in the manner and for the purposes herein shown and explained. 2nd, the arrangement of draft board M, rod N, and tube O, in the described combination with the last evaporating pan or compartment, for the purpose of modulating the heat thereto, as therein explained. 3rd, the provision of surface sluices J, constructed as described, for the easy discharge of scum, in the manner described. 4th, the combination of the two batteries A and A^1, placed side by side, one higher than the other, when in other respects constructed and arranged in the manner herein shown and described and for the objects stated."

No. 34,485. J. G. Fredenburr and J. L. George, of Columbia, Cal., for an "Improved water wheel."

"We claim the arrangement of the ledges h, and the guide plates i, with the sliding buckets d, chute E, and its enlargement g, as herein shown and described. The arrangement of the encompassing bar F, with the buckets d, and the chute E, as herein shown and described."

No. 34,486. Jas. R. Gill and Wm. E. Palmer, of Alton, Illinois, for an "Improved washing machine."

"We claim the combination and arrangement of the two toggles G, T, with the handle J, bar H, swinging pressure board D, stationary inclined board E, and suds box A, substantially as and for the purpose set forth."

No. 34,487. Charles Goldthwait, of South Weymouth, Mass., for an "Improved cloths drying apparatus."

"I claim the two swinging cranes C, C, provided with the pins f, and attached to the dwelling A, in connection with the connecting rod D, lines D^1, and retaining bar E, all arranged substantially as and for the purpose set forth."

No. 34,488. Ashman Hall and Jno. Faulkner, of Dansville, N.Y., for an "Improvement in fanning mills."

"We claim making that portion of the sieves of fanning mills shoes, which is exposed to the action of the fan blast, concave longitudinally as shown for the purposes set forth."

No. 34,489. H. Hall, J. Hall, T. Hall, and H. Hall, jr., of Philadelphia, Pa., for an "Improvement in metallic cases for pictures, cards, &e."

"We claim the new article of manufacture herein described, consisting of a metal case, composed of a cast metal frame, and sheet metal top and bottom or sides, substantially as set forth."

No. 34,490. William Hamilton, of West Pittsburgh, Pa., for an "Improvement in mode of securing wheels to axles."

"I claim the use of a nut for securing wheels to axles composed of two or more sections of a metallic ring, fitting into a groove in the axle, in such manner as to fill the entire circumference of the groove, the sections of the nut being united and held in place independently of and detached from the pipe box or hub of the wheel, substantially in the manner and for the purpose herein-before described."

No. 34,491. A. Horace Hastings, of New York, N.Y., for a "Piano."

"I claim, 1st, the employment of the scale B, so inclined that I can use the simplest and most effective form of action of the horizontal piano, while I obtain all of the advantages of the upright piano, substantially as set forth. 2nd, the employment of the hammer C, constructed and used as and for the purpose specified."

No. 34,492. J. P. A. Havard and J. B. Bourgoise, of Paris, France, for an "Improvement in portable filters."

"We claim, 1st, a filtering apparatus consisting of two receptacles B, C, formed of flexible waterproof fabric, filtering medium D, and wire gauze or perforated metallic desks *c*, *d*, when combined and arranged in the manner substantially as described. 2nd, the sliding tubes *n*, *o*, *p*, *q*, arm n^1, and bail *m*, arranged in combination with receptacle B, to operate substantially as described. 3rd, the flexible sides of the receptacles B, C, sliding tubes *n*, *o*, *p*, *q*, case H, and packet case or bucket I, combined and arranged in the manner and for the purpose set forth."

No. 34,493. Wm. H. Havens, of Paterson, N.J., for an "Improvement in projectiles for rifled ordnance."

"I claim the combination with the conical portion of the part B, and the part A, of the independent sliding packing segments C, C, all arranged and operating as herein shown and described."

No. 34,494. Paul Heilmann, of Mulhousetown, French empire, for an "Improvement in machinery for submitting yarns to the action of liquids."—Patented in England, 15th October, 1857.

"I claim submitting yarns or threads to the action of gaseous and liquid bodies for the several purposes above described, by means of a system of reels, operating substantially as herein set forth."

No. 34,495. Jonas N. Hawkins, of Islip, N.Y., for an "Improved clam opener."

"I claim as an improved article of manufacture a clam opening instrument composed of a base plate A, standard B, with guide arms *b*, *b*, and a knife C, pivoted to the standard at *a*, all as herein shown and described."

No. 34,496. C. F. Hendee, of Waterbury, Conn., for an "Improvement in hoop skirts."

"I claim as my invention in fastening metal hoops of hoop skirts, the indented metal fastening in combination with a metal hoop of a hoop skirt provided with a hole to receive the indentation of the fastening, substantially as described, and for the purpose of preventing the fastening from slipping from the hoop, substantially as set forth."

No. 34,497. A. B. Hendryx, of Seymour, Conn., for an "Improvement in hollow augers."

"I claim, 1st, the eccentrics *i*, for adjusting the cutters of a hollow auger, in combination with the screws *j*, cutter heads *f*, and dogs *a*, when arranged to operate substantially as described. 2nd, the combination of the V-shaped scroll *g*, and conical or taper pins *e*, with the inner flange *c* of the dogs, slotted face plate B, and wedge nut D, when arranged to operate in the manner described."

No. 34,498. F. Hollen and A. H. Pierce, of Blairsville, Pa., for an "Improved screw wrench."

"We claim a burr wrench with two jaws A, A^1, the inner surfaces of which are provided with ratchet teeth *b*, b^1, and which are united by a hinge joint *a*, and forced together by a suitable spring C, in the manner and for the purpose shown and described."

No. 34,499. John Holmes, of Boston, Mass., for an "Improvement in coal sifters."

"I claim as my invention the flexile sifter, constructed substantially in manner and so as to operate as specified."

No. 34,500. Nestor Houghton, of New York, for an "Improved spring bedstead."

"I claim, 1st, the combination and arrangement of the elastic laths made and constructed as described, with spiral springs, substantially as and for the purpose above described. 2nd, the combination with the lathes 6, 6^1, 6^{11}, 6^{111}, of the oscillating cross pieces 8, the parts being constructed, arranged, and operating substantially as set forth."

No. 34,501. Solomon Hunt, of Danville, Indiana, for an "Improvement in foot stoves."

"I claim the combination of the radiator B, reflectors *g*, *h*, and foot supports C, C, with the lamp D, when operating in the manner substantially as described for the purpose set forth."

No. 34,502. Wm. Johnson and Henry Davies, of Brooklyn, N.Y., for an "Improvement in bakers' ovens."

"We claim the application to an ordinary bakers' oven, wherein the fire heat can pass directly into and through the oven of the flues *a*, *a*, A and B, and dampers *h*, *k*, *f*, *b*, and *c*, arranged in the manner and for the purposes set forth."

No. 34,503. Gilman Joslin, of Boston, Mass., for an "Improvement in heaters."

"I claim, 1st, varying the temperature of the fire just in proportion to the quantity and temperature of the external air supplied to the furnace by means of a rod, plate, or bar, so arranged as to have the air so admitted keep in contact with it, and cause the expansion and contraction of the said rod, plate, or bar, thereby regulating the draft of the fire as set forth. 2nd, in heating apparatus constructed to operate substantially as herein set forth, I claim the arrangement of the lever arm, so that it can readily be inserted in or removed from its place, by providing said lever with the projections *v* and *w*, to fit into suitable sockets in the pieces which compose its fulcrum, as described."

No. 34,504. Edward M. Judd, of New Britain, Conn., for an "Improvements in repeating fire-arms."

"1st, I claim the loader G, constructed and applied in combination with the magazine and barrel as herein described, and combined with the breech slide C, by means of a rack and pinion to be operated by the act of opening the slide substantially as herein set forth. 2nd, combining the hammer by the breech-slide C, and the loader G, by means of a dog *k*, tooth *i*, and a system of rack and pinion gearing, substantially as and for the purpose herein specified."

No. 34,505. William S. Kelly, of Schenectady, N.Y., for an "Improvements in pumps."

"I claim, 1st, the combination with the chambers A, B, of a double acting pump, of a hollow piston rod G, and piston F, the valves *g*, of the piston F, being arranged between upper and lower passages *d*, *i*, and the same set of valves *g*, serving alternately for closing said upper and lower passages, substantially as and for the purposes described. 2nd, the combination of an annular spider H, and screw plate I, with the hollow piston F, and ball valves *g*, substantially as and for the purposes set forth. 3rd, constructing the annular spider H, with its arms *f*, of greater depth than the depth of its ring or hollow hub *e*, substantially as and for the purposes set forth. 4th, the combination of the base valve box D, having a narrow stop bar *a*, over the centre of each of its valve chambers, with the double chambered pump A, B, hollow piston F, and piston rod G, substantially in the manner and for the purpose described. 5th, the combination of the hollow piston F, and hollow piston rod G, with a stationary air chamber J, by a stuffing box *j*, at the lower end of the chamber J, substantially as and for the purposes set forth."

No. 34,506. Gabriel Farmer, of Marion, Pa., for an "Improvement in apparatus for bending tires."

"I claim the combination of the middle roller H, the sliding frame, the guides and central screw *d*, with the scale fig. 1, and index bar *c*, or its equivalent, substantially as specified."

No. 34,507. C. T. Judkins, of Boston, Mass., for an "Improvement in gas regulators."

"I claim the combination and arrangement of the valve H, with the pivoted or hinged cover E, the lever O, and adjustable balance weight L, substantially as and for the purpose and objects herein set forth."

No. 34,508. Hervey Kent, of Lewiston, Maine, for an "Improvement in sliver guides for carding engines."

"I claim the application of the sliver guide or hole A, to a carrier G, or its trough, by means of a circular plate B, or its equivalent, so as to be capable of being moved across the said carrier or trough, as the case may be, in a circular or curved path, substantially as and for the purpose of attaining results as above set forth. I also claim the combination of the circular ranges of teeth (*b*, *b*, *b*, *c*, *c*, *c*,) or their mechanical equivalents, with the guide plate B, and the trough thereof, the same being arranged for the purpose and to operate substantially as herein-before specified."

No. 34,509. Edmund Lockwood, of Ulster, Penn., for an "Improved shot hole stopper."

"I claim a shot plug consisting of a metallic plate or disk the outside of which is convex, the inside lined with an elastic covering having a spindle with bearded side springs, and a screw at its end with a cross-bar in which the end screw is inserted; the parts being constructed and arranged relatively to each other substantially as and for the purposes specified."

No. 34,510. Samuel Loring, of Duxbury, Mass., for an "Improvement in machines for leathering tacks."

"I claim the spiral conveyer I, in combination with the slotted bur M, or its equivalent, for the purpose of separating and conveying the tacks as set forth. 2nd, I claim the spring *b*, in combination with the the cam *g*, for the purpose of carrying the tack round to the nippers as set forth. 3rd, I claim the box *h*, in combination with the nippers, operating as set forth, for the purpose described. 4th, I claim the punch C^2, so constructed as to cut out the leather, and force it down upon the tack, as set forth."

No. 34,511. Francis X. Manahan, of Utica, N.Y., for an "Improvement in cheese vats."

"I claim, 1st, the perforated pipe M, placed longitudinally at the bottom of the box A, and communicating with the pipe K, substantially as shown, for the purpose of equally distributing the ascending hot water from boiler I, as set forth. 2nd, the arrangement of the pipes K, K^1, cocks *h*, h^1, and pipes O, L, with the boiler I, water boxes A, C, and milk vat E, as herein shown and described. 3rd, securing the cock F to the milk-vat E, through the medium of the pipe G, and screw-socket H, arranged substantially as shown and described."

No. 34,512. Wm. Mason, of Providence, R.I., for an "Improvement in connecting and disconnecting shafting."

"I claim, 1st, the two rims, united, A, or equivalent forming the V-shaped recess, when used in combination with the wedge segments C, C, and toggle jointed connections as described substantially as specified. 2nd, I claim the wedge segments C, C, when used in combination with the arms, disk, and sleeve, as described, for the purposes set forth. Lastly, I claim the application of the above described mechanism to shafting, gears, or other wheels rotating upon the shaft for a friction coupling, substantially as specified."

No. 34,513. Wm. M. Mason, of Polo, Illinois, for an "Improvement in machines for stacking hay."

"I claim the combination of the toggles I, pulleys *l*, *m*, and rope J, with the fork H, constructed as described, in the manner and for the purpose herein shown and set forth."

No. 34,514. Ira McDaniel, of Salem, Iowa, for an "Improved washing machine."

"I claim the application of the crank C, and shaft D, to the lower section of the wash-board A, giving it the vibratory motion in the rectangular tub R, all arranged and operating substantially as and for the purpose specified."

No. 34,515. Elisha B. McCoy, of Winsted, Conn., for a "Roller press for photographs, &c."

"I claim the combination of the reciprocating bed C, roller F, and frame E, when arranged, substantially as and for the purpose herein set forth."

No. 34,516. Nelson McCuen, of South Potsdam, N.Y., for an "Improvement in harrows."

"I claim a drag having the evener E supported upon adjustable rollers, and having the bars *a* bent at obtuse angles to the bars B, the teeth being arranged to said bars as set forth, and the whole constructed otherwise as herein shown and described."

No. 35,517. J. Vaughan Merrick, of Philadelphia, Pa., for an "Improved slide valve for steam engines."

"I claim a slide valve and balancing plate in combination with a double ported cylinder face, when the said valve is provided with such openings, and the said balancing plate with such chambers and ports, as to permit the steam to pass to and from the cylinder, substantially in the manner herein set forth."

No. 34,518. O. E. Miles, of Aurora, Ill., for an "Improvement in construction of wheeled vehicles."

"I claim the arms C, C, having the wheels B, B, permanently attached to them, and their inner journals fitted in boxes F, suspended on trunions *l*, and their outer journals fitted in boxes D, placed in frames E, attached to the bolster, when said parts are used in combination with the rods *f*, arranged substantially as shown for bracing the frames E, and with the frame *m*, in which the trunnions *l* are placed, and also with the lovers *r*, *r*, arranged substantially as shown for securing the trunnions *l* on frame *m*, as and for the purpose set forth."

No. 34,519. Jehiel Munson, of Burlington, Vt., and Joshua R. Lyon, of Shelburne, Vt., for an "Improvement in potato diggers."

"We claim the arrangement of the adjustable separating rods F, in combination with the perforated flange or lip $4\frac{1}{2}$, the perforated frame D, and separator clasp E, substantially in the manner and for the purpose specified."

No. 34,520. David O'Flanagan, of Charlestown, Mass., for an "Improved "Fruit strainer."

"I claim the box A, provided with a concave perforated bottom *a*, in combination with the curved rotating bar or stirrer E, when suspended from the cover B, and constructed, arranged, and oscillated, as and for the purpose herein set forth."

No. 34,521. William J. Palmer, of Flusking, N. Y., for an "Improvement in lamps, &c."

"I claim the combination with the cold air or draught chamber C, of the dome-shaped gas-condensing channel *c*, as and for the purpose herein shown and described."

No. 34,522.—Suspended.

No. 34,523. Joseph Reichman and Heinrich Kriete, of Chicago, Illinois, for an "Improved governor valve."

"We claim, 1st, the use of the steam of the boiler and that of the engine acting against each other, to operate the governor valve, or its equivalent, of a steam engine, by, 2nd, the peculiar construction and combination of the whole governor as described."

No. 34,524. John Revere, of Boston, Mass., for an "Improvement in preparing metallic moulds for casting metals."—Antedated 2nd November, 1861.

"I claim, in preparing a metallic mould for casting ordnance or articles of bronze, not only heating the mould so as to anneal it, and burn and oxidize its inner surface, but in afterward applying to the said surface the earthy wash, and to the latter a resinous coating, substantially as hereinbefore specified."

No. 34,525. Reuben A. Riley, of Greenfield, Indiana, for an "Improved mode of preventing jarring and jolting of railroad cars and locomotives."

"I claim the faced flange on the car wheels of uniform depths, the low-rail on the chair on the inside of the track lapping the head joints of the rails to support the car on the flange of the wheel while passing over the same; the face on the frog, and the face on the switch to receive and support the car on the flange of the wheels while passing over the head joints and open spaces thereon, and all these in combination fitted and adapted to each other; by which all open spaces in the track of railroads are practically closed, and the even plane of the cars in motion upon the track at all points maintained."

No. 34,526. Thomas Rogers, of Montgomery Square, Pa., for an "Improvement in liquid measures."

"I claim the measure A, with its piston G, and the movable cap D, with its tube *c*, the whole being constructed and arranged substantially as and for the purpose herein set forth."

No. 34,527. Daniel Sager, of Albany, N.Y., for an "Improvement in self-acting brakes for wheel vehicles."

"I claim the combination of the curved links C, C, with the pole A, and levers D, as herein shown and described. The

arrangement of the levers D, D, to slide longitudinally as well as turn circularly upon the axis pin as herein shown and described."

No. 34,528. Andrew Sawyer and Henry Barnes, of Burlington, Wis., for an "Improvement in cultivators."

"We claim the arrangement of the pendulous suspended frame C, attached draught pole F, shares E, rods D, and chains D^1, D^1, with the segments K, K, rock shaft I, and lever J, in the manner herein shown and described."

No. 34,529. Eliphalet S. Scripture, of New York, N. Y., for an "Improvment in oil cans."

"I claim, 1st, the use or employment of the protecting ring C, provided with the spring rests D, D, arranged and operating as shown for the purpose specified. 2nd, the bottom B, regulating screw H, and spring F, supported upon the rests D, D, or their equivalents, when the same shall be combined and operated in the manner and for the purpose specified."

No. 34,530. Melvin Shaw, of Abington, Mass., for an "Improved composition for dressing leather."

"I claim a dressing for leather, consisting of an alkaline solution of shellac, in combination with a solution of log-wood."

No. 34,531. S. J. Sherman, of Brooklyn, N. Y., for an "Improvement in springs for ladies' dresses."

"I claim a spring or busk for clothing, having the ends covered by a soft metal applied and secured substantially in the manner specified and for the purposes set forth."

No. 34,532. D. H. Shirley, of Boston, Mass., for an "Improved railroad switch."

"I claim a portable switch having as its essential elements a curved inclined way or groove, in combination with a suitable locking or clutching device for securely holding the switch firmly upon the rail, substantially as herein above described."

No. 34,533. S. J. Taylor, of Rome, N. Y., for an "Improved convertible straw cutter and corn sheller."

"I claim the bed piece B, gear wheel D, pinion F, spiral rib *b*, and drum A, combined, arranged, and adapted for the attachment of the spirally ribbed feed plates *j*, or spiral knives G, all as and for the purposes, substantially as described."

No. 34,534. W. H. Van Gieson, of New York, N.Y., for an "Improvement in nails for sheathing."

"I claim a sheathing nail made with converging flanges, and with grooves between the flanges, said flanges converging at the point of the nail, and the grooves terminating a short distance below the head, as herein shown and described."

No. 34,535. David Walker, of Newark, N. J., for an "Improved self-rocking cradle."

"I claim, 1st, the construction and arrangement, substantially as described, of the relief guides *c*, in combination with the pallets *a*, and escapement wheel *b*, in the manner set forth, and for the purpose specified, when used in a self-rocking cradle constructed as herein-before described. 2nd, in combination with a self-rocking cradle constructed as described, the stops *e* and *h*, constructed and arranged as and for the purposes described. 3rd, in combination with a self-rocking cradle constructed as described, the automatic fan *k*, *n*, *m*, *r*, constructed and arranged as described and shown, and operated by the movement of the cradle in the manner specified."

No. 34,536. George W. Walker, of Boston, Mass., for an "Improvement in sliding grates."

"I claim the arrangement and combination of the movable dog C, with the sliding grate A, and its supporting frame B, the whole being to operate together as specified."

No. 34,537. J. H. Walker, of Worcester, Mass., for an "Improved machine for pricking leather."

"I claim, 1st, the combination of the holding plate F, and pricking plate F^1, with table C, and its dovetailed guide stands or projections E, E, E^1, E^1, as and for the purposes set forth. 2nd, the combination and arrangement of plates F, F^1, and tables A, C, with forked levers H, J, and springs G, G^1, substantially as set forth. 3rd, the combination in the same machine of a perforated stationary table, having a holding plate above and a pricking plate below, with mechanism so combined with said plates that leather placed on the table and under the holding plate can be held by the upper plate while it is pricked by the points or awls in the lower plate by simply depressing a foot lever, substantially as set forth.

No. 34,538. Wm. F. Warburton, of Philadelphia, Pa., for an "Improvement in military hats."

"I claim the cape or curtain D, and movable sweat band C, when so combined and arranged that the sweat band shall serve to retain the cape in an elevated position, and when moved shall permit the cape to fall as herein set forth, for the purpose specified."

No. 34,539. H. H. Warden, of New York, N.Y., for "Improved ships' armor plates."

"I claim an armor plate for ships, composed of a wrought-iron frame imbedded within a cast-iron body, substantially as herein shown and described."

No, 34,540. Emanuel Wassenich, of Cincinnati, Ohio, for an "Improvement in portable ovens."

"I claim constructing a portable (army) oven A of boiler iron of the shape described, viz., semielliptically prismoidal, with arched ends *a*, *a*, and strengthened by ribs B, B, connecting hooks H, and beams C, C, substantially as and for the purpose set forth."

No. 34,541. John Weldy, of Dayton, Ohio, for an "Improved machine for sawing wood."

"I claim the combination and arrangement of the rock shaft G, arm H, links *h*, *h*, and saw beams J, constructed to operate substantially as described, for the purpose set forth. And in combination with the links which support the saw beam, I claim the guide bar *i*, substantially as described, for the purpose set forth."

No. 34,542. Anthony Werne, of Pittston, Pa., for an "Improved apparatus for making vinegar by the quick process."

"I claim the employment of the distributing shield C in combination with the tubes *b* and tub B, as and for the purpose herein shown and described. Having the bottom of the tub B provided with small tubes *a*, as and for the purpose herein shown and described. The tube H arranged and operating with the generator A, as herein shown and described. The combination with the generator of the condensor J, constructed substantially as shown, and tube I, as and for the purpose herein shown and described."

No. 34,543. Wells H. White, of Dubuque, Iowa, for an "Improved proofing."

"I claim, 1st, the roof constructed of the materials and in the manner substantially as described. 2nd, the dovetail fastening as described, for the purpose set forth. And, 3d, the combination of common salt, sand, coal tar, and coal ashes, to form a roof in the manner above specified."

No. 34,544. Thomas Wilson, of Silver Creek, Illinois, for an "Improvement in running gear of railroad cars."

"I claim the employment of tension springs between the trucks and their connecting rods, in combination with independent wheels, substantially as and for the purpose herein shown and described."

No. 34,545. Stephen S. Bartlett, of Providence, Rhode Island, assignor to himself and Thomas H. Dodge, of Washington, D.C., for an "Improvement in harvesters."

"I claim, 1st, supporting the rear end of a dray bar arranged to run on the ground at the side of the machine, with its rear end free to rise and fall, by means of an adjustable arm or lever, whose front end is supported by the axle or journal of the main wheels, and on the outside of the inner wheel, substantially as described. 2nd, the combination with the inner end of the axle or journal of the main supporting wheels of a grass harvester, of an elevating arm or lever, whereby the rear end of its hinged drag bar can be raised and lowered together with the heel of the finger beam, by the driver from his seat on the machine, while the elevating arm or lever has a firm support independent of the frame, sub-

stantially as described. 3d, the combination of the drag bar and compound lever arrangement with the main frame and finger beam of the machine, substantially as and for the purposes set forth."

No. 34,546. Frederick Chandler, of Charlestown, Mass., assignor to himself and C. A. Cousens, of Newton, Mass., for an "Improvement in camp stoves."

"I claim, 1st, forming a sectional stove pipe in such a manner that the sectional pieces, whether straight or tapering, shall be held together and to the stove by flanges or other positive mechanical devices to prevent their dismemberment from each other or from the stove. 2nd, so combining a sectional stove pipe constructed in the manner described with a stove, as to permit the said sectional stove pipe to be packed and enclosed by the stove as described."

No. 34,547. James F. Drumond, of New York, N.Y., assignor to Charles T. Reynolds, Fredk. W. Devoe, and Charles Pratt, all of New York, N.Y., for an "Improvement in packing cans for transportation."

"I claim the method of preventing the indentation, leakage, and weakening of paint cans, herein shown and described."

No. 34,548. James Easterly, of Albany, N.Y., assignor to himself and Dennis G. Littlefield, of same place, for an "Improvement in stoves."

"I claim a window or door for stoves, furnaces, and every character of heater, combining the properties of metallic gauze and of mica or other transparent material, for the purpose specified."

No. 34,549. George W. La Baw, of Jersey City, N. J., assignor to himself and Peter F. Campbell, of same place, for an "Improvement in springs for carriages, wagons, &c."

"I claim, 1st, the toggle joint bars *b*, *b*, in combination with the boxes *c*, *c*, containing the springs of india rubber, as and for the purposes specified. 2nd, I claim the cushions or buffers *f*, *f*, of india rubber applied to take the toggle joint bars *b*, *b*, in the manner and for the purposes set forth."

No. 34,550. Thomas S. Lambert, of Peekskill, N.Y., assignor to Henry W. Hunt, of same place, for an "Improvement in double windows."

"I claim the combination of light sash doors hung to the inside stops of a window with the movable stops K, K, L, so that when the door is closed it will abut upon the outer window sash, making in effect a double window, as and for the purposes set forth and described."

No. 34,551. Wilson T. Pogue, of Vienna, Indiana, assignor to Gorges Hely, of Richmond, Indiana, for an "Improvement in apparatus for holding wagon wheels while loading."

"I claim the arrangement of the rods B, E, F, swivel C, elevises D, D, D, D, in combination with the wheels A, A, the better to effect the purpose above described, the whole being constructed substantially as above described."

No. 34,552. Augustus J. Scoville and Augustus H. de Clercq, of Bloomington, Ill., for an "Improvement in pistons for steam engines."

"We claim the valve ring with the holes opening against it through the flange of the piston head, and through the follower, constructed and operating substantially as herein described. We also claim as our invention the combination of the small holes through the flange of the piston head, and through the follower, against the edge of the outside rings, with the inside and outside piston rings and the valve ring, and holes opening against it through the flange of the piston head and through the follower, the whole arranged and operating substantially as herein described."

No. 34,553. Elias W. Seymour, of Centre Lisle, N.Y., assignor to himself and Geo. W. Gregory, of Binghamton, N.Y., for an "Improvement in shifting hinge joint or coupling shafts of wagons."

"I claim a shifting hinge joint or coupling constructed in the following manner; to wit, the combination of the barrel A with the pivot [C, and slot D with the arm H, and its shoulder G, as and for the purposes herein described."

No. 34,554. J. Lawson Treat, of New York, N.Y., assignor to Yale and Curtis, of same place, for an "Improvement in drawing apparatus for portable vessels."

"I claim the vessel A, having an inner shell B fitted loosely within it, and suspended from the cover of the same by a vertical spring *d*, the said shell being open at the bottom, and provided with an aperture *c* in the top, which is closed when liquor is drawn from the vessel by a valve *j*, actuated by the same pressure that forces the shell down, and causes the liquor to flow from the spout of the vessel, when arranged to operate in the manner substantially as herein described."

Re-issues.

No. 1277. Henry Knight, of Jersey City, N.J., for an "Improvement in moulds for moulding cement pipes."—Patented 8th May, 1860.

"I claim, 1st, the use of a vertical stationary central core or its equivalent, substantially as and for the purpose set forth. 2nd, the combination of the detachable collar G, or its equivalent, and a flask or exterior mould F, *d*, *e*, constructed with two different diameters and with a shoulder *f*, or its equivalent, for the purpose set forth. 3rd, the use of the shouldered detachable base or bottom E, substantially as and for the purposes set forth. 4th, the use of a detachable collar or tool G, or its equivalent, for forming a right angle or nearly right angle socket within one end of the cement pipe, substantially as and for the purposes set forth. 5th, the use of an adjustable perforated centring table in combination with a cement pipe machine, substantially as and for the purposes set forth. 6th, producing by vertical moulding, with means substantially as described, sections of cement pipe with external collars and right angle or nearly right angle sockets, as set forth. 7th, removing the moulded cement pipe from the machine by raising it vertically, substantially as set forth."

No. 1278. John G. Perry, of South Kingston, R.I., for an "Improvement in meat-cutting apparatus.' —Patented 26th February, 1850.

"I claim, 1st, the use and employment of the studs *s*, *s*, *s*, Figure 3, with one or both of the discharge openings L, L, substantially as described, and for the purpose herein set forth. 2nd, I claim combining the knives and space blocks with the case of a meat cutter, in the manner substantially as herein described, and for the purposes set forth."

No. 1279. Sanford Harroun and Co., of Buffalo, N.Y., assignees by mesne assignments of Geo. F. Hebard, George J. Hill, and S. D. Rockwell, of same place, for an "Improvement in printing presses."—Patented 7th August, 1860.

"We claim, 1st, the combination of the spool or roller C (or the equivalent thereof), which carries a roll of printing paper (or thin card board, which may be wound into a roll), with feeding rollers, which have an intermittent feed movement, and the printing and numbering mechanism of a printing and numbering machine, substantially as herein described, so that the paper or card board may be run off from the roller, and fed in by an intermittent movement of the feed rollers, and properly presented for printing and numbering coupon tickets from a continuous sheet of printing paper or card board, substantially as set forth. 2nd, the combination and arrangement of the cutting mechanism with a roller (or equivalent) carrying a roll of paper or card board, and the printing and numbering mechanism of a printing and numbering machine, so that coupon and other tickets may be printed, numbered, and cut simultaneously from such printing paper or card board, substantially as described. 3rd, in a machine for printing and numbering coupon tickets, we claim, in combination with the printing mechanism for printing the tickets, making the numbering wheels adjustable horizontally, substantially as described, whereby the machine can be readily adapted to numbering tickets of different widths. 4th, in a machine for printing tickets from a roll or continuous sheet of printing paper (or thin card board), we claim making the feed rollers so as to act upon a portion of the width of the sheet instead of the whole width, whereby we are enabled to feed in thin sheets of printing paper or thin card board in a smooth and even manner."

No. 1280. Alexander Swift, of Cincinnati, Ohio, assignee by mesne assignments of Issacher Frost and James Monroe, of Albion, Michigan, for an "Improvement in mode of separating flour from

bran."—Patented 27th February, 1849.—Re-issued 13th March, 1855.—Again re-issued 11th May, 1858.

"We claim, 1st, the combination of the essential features herein-before severally described, and severally numbered 1, 2, 3, and 4, or their equivalents, substantially as they are described, and for the purposes specified in the several numbers. 2nd, we also claim the combination of the essential features herein-before severally described and severally numbered 1, 2, and 5, or their equivalents, substantially as they are described; the purpose of the combination being substantially as set forth in Number 5. 3rd, we also claim the combination of the essential features herein-before severally described, and severally numbered 1, 2, and 6, or their equivalents, substantially as they are described. The purpose of the combination being substantially as set forth in Number 6. 4th, we also claim the combination of the essential features herein-before severally described, and severally numbered 1, 2, 6, and 7, or their equivalents, substantially as they are described; the purpose of the combination being substantially as set forth. And 5th, we also claim the combination of the essential features herein-before severally described and severally numbered 1, 2, 4, 5, 6, and 7, or their equivalents, substantially as specified; the purpose of the combination being substantially as severally set forth."

No. 1281. John E. Brown and Stephen S. Bartlett, of Woonscocket, R.I., and Thomas H. Dodge, of Washington, D.C., assignees of said Brown and Bartlett, for an "Improvement in grain and grass harvesters." — Patented 2nd January, 1855.—Re-issued 1st January, 1861.

"We claim, 1st, the combination of a hinged or yielding drag bar I, or its equivalent, with the main frame and finger bar or cutter stock of a harvesting machine, in such a manner that as the frame is advanced the drag bar, or its equivalent, will be advanced, and that in its turn will draw forward the finger bar which supports the cutting apparatus, which is left free to rise or fall bodily (or at the heel end while the outer end rests on a lower surface) without affecting the motions of the main frame. 2nd, the use and employment in a harvesting machine of a yielding drag bar, or its equivalent, arranged on the inner side of the machine, in combination with hinging the heel of the finger bar to said drag bar, whereby the entire cutting apparatus is left free to rise or fall bodily, or either end thereof, independent of the other, and without affecting the motions of the main frame. 3rd, hinging the front elevated end of a drag bar, to which the heel of the finger bar is connected in a harvesting machine to the front inner side of the main frame, in combination with giving said drag bar a lateral support in rear of the axis of the main wheels, whereby the strain on the frame is divided while the rear end of the drag bar is retained in proper position, but left free to rise and fall independent of the main frame, for the purposes stated. 4th, fastening the heel end of the finger bar which supports the cutting apparatus in a harvesting machine to a heel piece, which in turn is hinged in a recess in the end of a yielding drag bar, whereby the cutting apparatus is properly supported and kept in position at the side of the machine, and yet left free to conform to the inequalities of the ground without affecting the motions of the main frame. 5th, the combination of the drag bar I with rock shaft H^1, and the front of the main frame, substantially as set forth. 6th, the use of a single draw or drag bar attached at its forward and elevated end to the machine by a connection, so that its rear end can rise and fall as specified, in combination with a hinged or rigidly connected cutter stock or finger bar, for the purposes specified. 7th, hinging the finger bar in a grass harvesting machine to a vibrating drag bar, or equivalent device, when said drag bar or equivalent device is used for the purpose of sustaining and supporting the cutting apparatus to the right of the path of the inner main wheel of the machine, and of allowing it to conform freely to the uneven surface of the ground while the machine is in operation."

No. 1282. Jno. E. Brown and Stephen S. Bartlett, of Woonsocket, R.I., and Thomas H. Dodge, of Washington, D.C., assignees of said Brown and Bartlett, for an "Improvement in grain and grass harvesters." — Patented 2nd January, 1855.—Re-issued 1st January, 1861.

"We claim, 1st, the combination of a floating folding finger bar with the frame of a grass harvesting machine, whereby, when the machine is in operation, the cutting apparatus is left free to conform to the inequalities of the ground without affecting the motion of the main frame, and is also capable of being raised and turned or folded up so as to facilitate the passage of the machine from place to place or over fields of cut grass. 2nd, the arrangement of a floating folding finger bar with the frame of a grass harvesting machine in such a manner that the attendant can freely approach said finger bar from the rear, and turn up the outer end thereof, with facility to pass stumps, stones, or through gates, without tipping up or raising the carriage while the main weight of the finger bar is allowed to rest on the ground at the side of the machine for the purposes stated. 3rd, the combination of a stop V, or any equivalent device, for the purpose stated, with the heel of a floating folding finger bar and the frame of a grass harvester."

No. 1283. Jno. E. Brown and Stephen S. Bartlett, of Woonsocket, R.I., and Thomas H. Dodge, of Washington, D.C., assignees of said Brown and Bartlett, for an "Improvement in grain and grass harvesters." — Patented 2nd January, 1855.—Re-issued 1st January, 1861.

"We claim, 1st, the combination of the following elements in a grass harvesting machine, viz., a main frame, two supporting wheels to sustain said frame laterally, and at the proper height above the ground a rigid tongue to draw and steady the machine by, and a floating finger bar, for the purposes stated. 2nd, so combining in a grass harvester a floating finger bar, a frame to support the driver, and the tongue or draft beam by which the machine is drawn forward, as that the finger bar which supports the cutting apparatus can rise and fall freely at either or both ends without affecting the motion of said frame or tongue. 3rd, the combination and arrangement in a grass harvesting machine of a frame to carry the driver, two wheels to support said frame, one at each side thereof, a tongue to draw the machine by, and a double jointed finger bar attachment, substantially as and for the purposes stated. 4th, combining the floating finger bar with the frame of a grass harvesting machine, so that said floating finger bar shall project entirely from the right side of the machine, substantially as and for the purposes stated."

Designs.

No. 1542. Elemir J. Ney, of Lowell, Mass., assignor to The Lowell Manufacturing Company, of same place, for "Five designs for carpet patterns."

No. 1547. Isaac B. Woodruff, of Winchester, Conn., for a "Design for a clock case."

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 4th March, 1857, and each bearing that date.

No. 34,555. J. S. Atterbury, J. Reddick, and T. B. Atterbury, of Pittsburg, Pa., for an "Improvement in moulds for glass ware."

"We claim, 1st, the means and manner, substantially as herein described, of pressing articles of glass ware in bas-relief. 2nd, the means and manner of uniting the bas-relief glass work, to the outer surface of blown glass-ware, substantially as herein described."

No. 34,556. B. H. Bartol, of Philadelphia, Pa., for an "Improvement in steam boilers."

"I claim the furnace B, diving flue H, one or more horizontal flues J, and the return flue M, with its vertical tubes, the whole being arranged within the casing A, as and for the purpose herein set forth."

No. 34,557. John A. Bassett, of Salem, Mass., for an "Improved apparatus for carburetting gas."

"I claim, 1st, the combination, substantially as herein described, of a vessel A, in which the gas passes circuitously over the surface of the hydro-carbon liquid, to be partly carburetted and cooled by the evaporation of the liquid, and a vessel B, containing a porous substance, and saturated with such liquid, through which the gas subsequently passes, as herein set forth. 2nd, the gas regulating valve *j*, and float *k*, combined with a gas napthalizing or carburetting apparatus, substantially as herein specified, that is to say, with the float floating in the naphtha or other hydro-carbon liquid used for carburetting process."

No. 34,558. R. H. Blair and A. W. Beatty, of Saltsburgh, Pa., for an "Improvement in horse-rakes."

"We claim the connecting of the bar K of the rake to springs Q, Q, through the medium of the arms J, J, rods O, and links P, in connection with the rods I, I, crank-shaft F, lever G, and rack-plate E, all arranged and mounted as shown, to operate as and for the purpose set forth."

No. 34,559. Joseph M. Blake, of Madison, Wisconsin, for an "Improvement in horse powers."

I claim, 1st, the endless apron A, when constructed substantially as described, with supports *f*, and connecting blocks *a*. 2nd, the arrangement of the large friction rollers B, drum C, and end roller D, in combination with the endless apron A, substantially as and for the purposes specified."

No. 34,560. Joseph Bondy, of New York, N. Y., for an "Improvement in knapsacks."

"I claim the straps D, D, extending from and connecting the rear upper edge of the knapsack to the shoulder straps (or strap) C, which are fixed to the front side of the knapsack, substantially as and for the purpose herein specified."

No. 34,561. Wm. H. Brown, of Worcester, Mass., for an "Improvement in breech-loading fire-arms."

"I claim, 1st, the peculiar method of moving the barrel in both directions, and holding it against the breech J, by means of the locking bar D, in combination with the parts E, F, and G. 2nd, the combination and relative arrangement of the inclined or wedged shaped adjustable packing piece *o*, with the stock and front bevelled end of the locking bar D, substantially as and for the purpose set forth. The combination and arrangement of the adjusting piece E with the adjusting screws *e* and *r*, for adjusting the pressure of the barrel against the breech, substantially as set forth. 4th, the combination and peculiar arrangement of the connecting piece F with the locking bar D, and the lever G, as described, whereby it is allowed a longitudinal motion to facilitate the passage of the joint *c* past the plane of the axes *n* and *a*, during the operation of locking and unlocking the barrel. 5th, the combination with the stationary breech J, and the recessed rear end of barrel B, of the projecting hooks *m*, *m*, *m*, constructed and arranged to operate as described, whereby the cartridge case can be placed in position by a simple downward movement of the hand and there retained in a central position as respects the bore of the barrel until after the charge has been fired and the barrel unlocked for the purposes set forth."

No. 34,562. R. S. Chapin, of New York, N.Y., for "Improvement in lamps."

"I claim in combination with the wick tube constructed as aforesaid, I claim the deflecting cap *e*, applied in the manner and for the purposes specified."

No. 34,453. Wm. Z. W. Chapman, of New York, N.Y., for an "Improvement in fastenings for cartridge boxes."

"I claim the clasp *f*, formed substantially as specified, and applied to the lower part of the flap of a cartridge or cap box, and connecting to the bottom of said cartridge or cap box in the manner set forth, so as to form a fastening that can be worked by the fingers in the act of opening or closing said box, as described and shown."

No. 34,564. Charles W. Clewly, of Providence, R.I., for an "Improvement in watch and locket cases."

"I claim a rim for lockets and similar metallic cases formed of sheet metal in such manner that the face of the field piece within the case and the exterior surface of the rim are both formed from the same side or surface of the original sheet metal, and that the field piece and rim are of one piece of metal."

No. 34,565. Francis H. Cuypers, of Newark, N.J., for an "Improvement in hinges and hooks."

"I claim, 1st, the combination of the wedges B, casing C, and tongues E, constructed and operating as set forth. 2nd, the combination of the projecting flange F^1, with a hinge having tongues expanded or deflected by wedges as herein-before explained."

No. 34,566. William H. Doane, of Chicago, Illinois, for an "Improvement in machines for cutting veneers."

"I claim the combination of the cast iron concave and curved grooved ribs, with the brass faces or other equivalent metal, arranged and connected in the manner and for the purpose specified."

No. 34,567. G. A. Dabney, of San Jose, Cal., for an "Improvement in apparatus for operating churns."

"I claim the arrangement of the vibrating frame J, arm *m*, and connecting rod m^1, in combination with the cord *f*, dasher I, *i*, *j*, tub F, and swinging frame E, *a*, *b*, constructed and operating in the manner and for the purpose herein shown and described."

No. 34,568. Alexander Douglas, of English Neighborhood, N.J., and S. S. Sherwood, of Acquackanonck, N.J., for an "Improvement in ladies skirts."

"We claim, 1st, the combination in the manner above described of the hoops 1, 1, tapes 2, 2, and braids 3, 3. 2nd, the combination with the waistband 8, and with each other, of the metal plate or strap 6, and the eyelets 7, 7, substantially as set forth. 3rd, the construction of the slides for expanding the skirt with continuous bars upon the outer side of the hoop, or side furthest from the sliding portion, and with pointed teeth upon the inner side instead of continuous bars, in the manner and for the purpose described, the pointed teeth alternating with the bars as shown. 4th, the combination with the upper continuous hoop of the stay 4, and eyelet 5, substantially as described."

No. 34,569. Daniel Fitzgerald, of New York, N.Y., for an "Improvement in tents."

"I claim, 1st, constructing a tent in the calêcho form so that it may fold compactly together vertically in a flat form and be readily erected, substantially as above described. 2nd, the use of the flanged collars to hold the radial braces, constructed substantially as above described."

No. 34,570. Francis B. Franklin, of Appleton, Wis., for "Improved spring bed bottoms."

"I claim the combination of the coils F, F, loops G, G^1, rods H, H^1, and eyes E, all constructed, arranged, and connected in the manner herein shown and explained, so as to constitute a continuous elastic web."

No. 34,571. William O. Groover, of Boston, Mass., for an "Improvement in sewing machine needles."

"I claim an eye pointed needle having an interrupted groove on one side, and a continuous groove on the other, substantially such as are herein described."

No. 34,572. Oliver P. Hatfield, of New York, N.Y., for an "Improved elevator."

"I claim the construction of an elevator or 'dumb waiter,' supported wholly upon one side, ascending and descending in a vertical course, substantially in the manner described."

No. 34,573. William G. Hermance, of Albany, N.Y., for an "Improvement in straw cutters."

"I claim the combination of the bell crank lever G, link E, knife F, and standards or arms C, D, cast or secured to the mouth-piece B, substantially as and for the purposes set forth."

No. 34,574. George B. Hicks, of Cleveland, Ohio, for an "Improvement in telegraph apparatus."

"I claim, 1st, the employment of an adjustable magnet m^1, m^1, as and for the purpose herein set forth. 2nd, I claim the double armature lever M, with the attached armatures a^2, a^3, arranged and operating as specified. 3rd, I claim the employment of the local battery, number 1, in combination with the helix m^1, m^1, the conducting wires w^1, w^1, and the points *o*, and *e*, arranged and operating as and for the purpose described. 4th, I claim the employment of two points, one on each end of the sounder armature lever L, by means of which circuit through two magnets on opposite sides of the same armature may be closed or broken simultaneously, and thus the armature lever held still for the purpose described. 5th, I claim the combination of the adjustable local magnet m^1, m^1, with the receiving and recording instruments, when arranged and operated as and for the purposes specified."

No. 34,575. James P. Hillard, of Full River, Mass., for an "Improved high and low water detector for steam boilers."

"I claim the combination of valve B^1 with two ports, and detector A^1 with one port, and adjusting arm J^1 attached to B^1, and float F^1, constructed and arranged to operate so that when the water falls to a certain line in the boiler, the float F^1 resting on the water will open the valve and allow the steam to escape through port D^1, to give alarm; and when the water rises to a certain line in the boiler, the float F^1 will rise and open the valve, and allow the water to escape through port C^1, and give alarm, substantially as and for the purposes set forth and described."

No. 34,576. Wm. H. Holbrooke, of New York, N.Y., for an "Improved silicated soap."

"I claim the combining of a soluble alkaline silicate with rice flour or an analogous flour by the process herein-before described, or its equivalent, to be used as an ingredient in soap making."

No. 34,577. Samuel Jarden, of Baltimore, Maryland, for an "Improved odorizer kerosene oil."

"I claim the manner of odorizing kerosene oil as above stated, or by combination with said essential oils in greater or less proportions, if the said manner of odorizing be substantially the same."

No. 34,578. William H. Kelley, of Onondaga Co., N.Y., for an "Improvement in cultivators."

"I claim the combination of the central beam made as described with the shares 5, and shanks *a*, when constructed and operating as set forth, and attached to the beam by means of clasps and bolts as shown by figs. 7, 7."

No. 34,579. Benedikt King, of Providence, R.I., for an "Improvement in cartridges adapted to breech-loading fire-arms."

"I claim the use and employment of a cartridge having its base formed substantially as described, in combination with groove V, and plate J, when said plate forms a port or one side of the groove or hole V, being constructed and operating substantially as herein set forth."

No. 34,580. Lewis Kirk, of Reading, Pa., for an "Improvement in brick machines."

"I claim, first, the formation of solid building brick by compressing the clay in and forcing it out of forming tubes, and by subsequently trimming the ends by the means and substantially in the manner as herein described. 2nd, gradually condensing the particles of clay, and expelling the air therefrom by compressing the clay in a separate chamber previous to its being forced in and through the forming tube by the means substantially as described and for the purposes set forth. 3rd, in combination with the mechanism herein-above described for compressing the clay by forcing it in and through a forming tube, I claim a mechanism constructed, arranged, and operating substantially as set forth, for dividing the compacted mass of clay into bricks of suitable length, and for simultaneously trimming both ends. 4th, in a brick machine constructed to operate as herein described by forcing the compressed clay in and through a forming tube. I claim the mechanism for regulating at will the supply of clay into the compression chamber, substantially in the manner and for the purpose herein set forth. 5th, the mode herein described of dividing transversely the mass of clay compacted into shape by the employment, in combination with the revolving trimming knives or their equivalents, of a fixed and movable platen and tray, constructed to operate as set forth, so as firmly to hold the mass of clay to constitute a brick around its longer sides while it is being cut at its ends. 6th, the construction of the hopper with curved grate bars at the bottom thereof, when said bars are provided with projecting teeth shaped and combined with revolving triturating blades as described, the whole arranged substantially in the manner to operate as herein set forth."

No. 34,581. Azel Storrs Lyman, of New York, N.Y., for an "Improved process of separating the fibers of wood and other substances for the manufacture of paper pulp."

"I claim, 1st, effecting the separation of the fibres of wood, hemp, flax, or other vegetable matters by subjecting them, in a close vessel or vessels, to the combined simultaneous action of a whipping, beating, rubbing, grinding, or picking apparatus, and of water at a high temperature and pressure. 2nd, the washing out of the gummy and coloring matters or other soluble parts from the fibres by changing the water while the substances are being subjected to the combined or simultaneous action above specified."

34,582. P. W. Mackenzie, of Jersey City, N.J., assignor to Addison Smith, of New Jersey, N. J. for an "Improved gas compensator."

"I claim the use of the compensating plates A, A, the connecting and adjusting rods *g* and *j*, in combination with the valve *s*, and circular valve seat *d*, *d*, or its equivalent, with long narrow ports *s*, *s*, the whole substantially as herein set forth."

No. 34,583. Bernard F. McAlhatten, of New York, N.Y., for an "Improved bed for ships and hospitals."

"I claim the construction of a bed with both the end pieces, and the bottom pieces forming the bottom laths, made of air-tight chambers, the whole being arranged and combined in the manner and for the purpose substantially as described and specified."

No. 34,584. J. H. Mears, of Oshkosh, Wisconsin, for an "Improvement in rakes for harvesters."

"I claim guide X, constructed and operating as set forth, and arranged relatively with guide N, standard 3, bevel wheel S, and double rake P, as and for the purposes set forth."

No. 34,585. Andrew D. Milne, of Tiverton, R.I., for an "Improvement in tobacco pipes."

"I claim, first, providing the stem of a tobacco pipe, with a removable metallic condenser, substantially as and for the purpose set forth. Second, providing the bowl with a removable lining constructed as described, in combination with the removable partition, substantially as and for the purpose set forth. Third, providing the stem with a valve, which may be opened and closed at pleasure, as set forth."

No. 34,586. John Mittlehaus, of Berlin, Prussia, for an "Improvement in setting artificial teeth."

"I claim the construction of button set teeth, by combining the following elements: first, a tooth plate *a*, in proportion to length and breadth at more or less places perforated by oval openings; second, an edge or rim *b*, surrounding all openings of the tooth plate on the side facing the pituitary membrane; third, a cover *c*, a little larger than the said edge, soldered to the tooth plate at the side turned to the mouth hole, so as to leave a space between the tooth plate and the cover, substantially as shown and described."

No. 34,587. Robert Morrison, of Newcastle-upon-Tyne, England, for an "Improvement in apparatus for forging a crushing iron."—Patented in England, 6th August, 1853.

"I claim, first, the system or mode of constructing such apparatus with the piston, piston rod, or hammer bar and guides in one solid mass. Second, a hammer bar for steam hammers, constructed substantially as described, and arranged in relation to other parts of the apparatus, so as to dispense with the use of guides below the cylinder."

No. 34,588. Byron W. Nichols, of Fair Haven, Conn., for "Coupling for octaves, &c., in melodeons."

"I claim a melodeon valve made with its rear portion, so extended and bevelled that it may be opened by pressing the rear end toward the reed board, as readily and effectually as by pressing the front end from the reed board, when it is made and fitted for the purpose of coupling octaves, substantially as herein described. 2nd, I claim the use of the shaft cam C, when it is made to serve the double purpose of bringing the diagonal levers into position, and also forming a complete fulcrum on which the whole series of diagonal levers may be vibrated when made, located, and used, substantially as herein described. 3rd, I claim the use of a series of single diagonal levers *c*, in combination with valves *d*, fitted to be worked at both ends, for the purpose of coupling octave, when the whole is constructed, arranged, and fitted to produce the result, substantially, as herein described. 4th, I claim the use of the series of single diagonal levers *c*, in combination with the shaft cam C, when constructed, arranged and operated substantially as herein described."

No. 34,589. L. C. Palmer, of East Winsted, Conn., for an "Improvement in furnaces for heating scythes, &c."

"I claim the arrangement of the recess G, and ledge *g*, with the fire-box B, flue D, and openings *i*, as and for the purpose herein shown and described."

No. 34,590. James L. Plimpton, of New York, N.Y., for an "Improvement in fastenings for skates."

"I claim, 1st, the combination of the connecting link D, and sole plate A, with an adjustable or permanent stop, substantially as described. 2nd, the connecting link D, lever and catch, or equivalent device, in combination with the stop E, and sole plate A, when combined and arranged to operate substantially as described."

No. 34,591. H. J. M. Puistienne, of Paris, France, for an "Improved mode of treating copper ores."

"I claim the mode herein set forth, of treating copper ores and particularly the application of sulphur, chloride of calcium or chloride of lime, or other chlorides, for the purposes of the present invention, and I wish to be understood that the proportions of the chemical agents above-mentioned may be varied according to the nature of the copper ores to be operated upon."

No. 34,592. George W. Putnam, of Smithfield, N.Y., for an "Improved device for purifying butter."

"I claim having the vessel A, provided with butter-escape openings *g*, in combination with the adjusting perforated slides *h*, substantially as herein shown and described for the purpose set forth."

No. 34,593. T. C. Richards, of Milwakie, Wis., for an "Improvement in curtain fixtures."

"I claim as a new article of manufacture a certain fixture or pressure roller constructed as and for the purpose set forth."

No. 34,594. E. P. Russell, of Manlius, N.Y., for an "Improvement in harvesters."

"I claim the combination of the tapering or conical rollers *a*, with the bevel outward on the flange *c*, operating as described, and for the purposes set forth."

No. 34,595. Edwin M. Scott, of Auburn, N.Y., for an "Improvement in machines for turning and mortising hubs."

"I claim the pivoted bar I, provided with the parallel guides *f*, *f*, and sliding heads J, N, the heads being provided one with the cutter M and the other with the chisel O, and augers *j*, and the head J, operated by a screw K, and connected with the head N by a bar T, when required, all being arranged and combined with a turning lathe, to operate as and for the purpose set forth."

No. 34,596. Charles W. Small, of Bangor, Maine, for an "Improvement in projectiles for rifled ordnance."

"I claim furnishing a projectile with a packing formed of strips *a*, *b*, *a*, *b*, of flexible metal partly imbedded in the metal of which the projectile is formed and partly lapping each other on the exterior of the projectile in such manner as to form an expanding tube, substantially as and for the purpose herein specified."

No. 34,597. Charles L. Spencer, of Providence, R.I., for an "Improvement in mode of converting motion."

"I claim the use of the spring I, or its equivalent, in combination with the curved connecting rods G, G, for the purpose of enabling the operating pawls to be so adjusted as to obtain an effect upon the shaft equal to the action of the crank, while the danger of hanging upon the dead point is prevented, substantially as described."

No. 34,598. L. L. Stearns, of Jersey Shore, Pa., assignor to himself and L. M. Muyr, of same place, for an "Improved washing machine."

"I claim the construction of the adjusting lever C, in connection with the main lever B, and in combination with the spring D, substantially as and for the purpose specified."

No. 34,599. Collins and Munroe Stevens, of Boston, Mass., for an "Improvement in clocks."

"We claim the tooth or detent M turning about a centre pivot or support, as described, in connection with the lever *m*, *m*, subtantially as and for the purposes set forth. We also claim the method of relifting and relocking the lever *m*, *m*, and the tooth or detent M, by the cams *n*, substantially as described. We claim the combination of the wheel *h*, the wheel *c*, and the shaft *i*, as described for the purpose of rewinding the spring at the scape wheel, substantially as described. We further claim the socket *v*, protruding through the plate B^1, in the manner described in combination with the arm *w*, the pin *y*, and the spring *x*, substantially as described, for the purpose of setting the time part of the clock."

No. 34,600. William W. St. John, of Pleasant Mount, Mo., for an "Improvement in current water wheels."

"I claim fitting the pairs of buckets *g*, *h*, and *i*, *k*, when arranged at right angles upon the adjustable block or hub *f*, in the manner specified, so that said buckets by the adjustment of the block can be so placed as to return above the surface of the water, while the buckets in action are immersed as much as possible, as set forth."

No. 34,601. J. F. Tapley, of Springfield, Mass., for an "Improvement in printing and cutting paper."

"I claim the combination of the cutter or die B, with the block C, and springs D, D, or their mechanical equivalents, when constructed and operating substantially in the manner and for the purpose fully set forth in the above description."

No. 34,602. Elmer Townsend, of Boston, Mass., for an "Improvement in canister or case shot for ordnance."

"I claim the arrangement and combination of the wings *h*, with the head H, the case A, and the charge of balls thereof, the whole b ing to operate together substantially as and for the purpose or purposes as specified. I also claim the combination and arrangement of the part C, with the shell case A, the sabot D, and the packing *d*. I also claim the combination and arrangement of the cap G, and one or more lateral orifices *f*, with the fuse tube and a chamber *n*, formed in the rear end of the sabot, as specified. I also claim the combination of one or more flanches *k*, *k*, or the equivalent therefor, with the loading chamber and the winged head applied thereto. I also claim the construction of the cap L, and the wings *h*, viz,, in two separate parts, substantially in manner and so as to be combined together as described."

No. 34,603. Geo. O. Townsend, of Boston, Mass., for an "Improvement in tents."

"I claim, 1st, elevating or erecting the tent and graduating the tension of the canvas A thereof by means of a sliding frame D, placed on the pole B, and operated by means of the screw C, on the pole and the ring or band E, and pin *d*, or their equivalents, as set forth. 2nd, the combination of the toggles *o*, and attached cords *p*, *q*, with the flaps *l*, in the manner herein shown and described."

No. 34,604. J. B. Van Deusen, of New York, N.Y., for an "Improved car coupling."

"I claim the shackle D, provided with the spiral flanches *a*, *a*, in combination with the drawheads A, A, having spiral openings C, C, arranged relatively with the flanches *a*, *a*, of the draw heads, to operate as and for the purpose set forth. I further claim in connection with the shackle D, and draw heads A, A, the back plates *b*, attached to the frames B, and provided with the recesses or notches *c*, for the purpose of holding or sustaining the shackle, as set forth."

No. 34,605. Geo. Westinghouse, of Schenectady, N.Y., for an "Improvement in grain and seed winnowers."

"I claim the arrangement together of the swinging shoo H, when operating as specified, fan C, and adjustable box N, as herein shown and described for the purposes set forth."

No. 34,606. C. Whipple, of Providence, R.I., and R. J. Stafford, of Smithfield, R.I., for an "Improvement in machines for combing cotton."

"We claim, 1st, the mode of operation substantially as specified, by means of which a tuft of cotton or other fibrous material after it has been detached from the main body of the stock is transferred to successive holding jaws, and subjected to the operation of being combed alternately on each side and both ends, as set forth. 2nd, we claim the combination of a pair of vibrating feed rollers C, with a series of jaws B, B, having an intermittent rotary motion, substantially as described, for the purpose of separating the stock to be combed into tufts. 3rd, we claim giving to each series of jaws an intermittent rotary motion substantially as described for the purposes specified. 4th, we claim a doffer cylinder H, in combination with the cylinder No. 3, so arranged as to

receive the several tufts after they have been combed in successive overlapping layers preparatory to being formed into a continuous sliver."

No. 34,607. GEORGE M. ZELL, of Waynesville, Ohio, for an "Improvement in water elevators."

"I claim the combination of the wheel or pulley E, spout J, and bucket H, provided with the valve L, and lever N, when arranged for joint operation, substantially as and for the purpose herein set forth."

No. 34,608. THEODORE ATTENEDER, of Philadelphia, Pa., assignor to himself and R. H. Gratz, of same place, for an "Improvement in telescopes for measuring distances."

"I claim the use in telescopes, spy glasses, &c., of a plain glass disk situated in the focus of the eye lens, a scale being marked on the disk, and that scale so graduated as to enable the observer to ascertain the distance of an object of given dimensions."

No. 34,609. JEHU BRAINERD, of Cleveland, Ohio, assignor to Brainerd and Burridge, of same place, for an "Improvement in tanning."

"I claim the use of the salix grisea for the purpose of tanning, when prepared as herein set forth."

No. 34,610. JOSEPH R. GILL, W. E. PALMER, and W. W. WEBB, of Alton, Ill., for an "Improved clothes wringer."

"We claim the bars A, A, provided with the jaws B, B, in combination with the jaws M, M, sockets G, G, roller bearings D, H, springs K, K, and nuts L, fitted on the bars A, A, and all arranged for joint operation substantially as and for the purpose set forth."

No. 34,611. WILLIS L. GREGORY, of Amsterdam, N.Y., assignor to himself and Gardner Landon, junr., of same place, for an "Improvement in skates."

"I claim the combination of the screws B^1, B^1, with the runner knees, caps D, D, nuts C, C, and stock A, in the manner herein shown and described."

No. 34,612. O. J. HALL, of Pittsford, N.Y., assignor to himself and Franklin Decker, of same place, for an "Improvement in railroad chairs."

"I claim clamping the two halves C and C^1, of the chair together by means of a single flat tapering key K, as specified, when the said halves C and C^1, are matched together by a tongue and groove running horizontally under the base of the rail as shown and described, and are provided with stops S."

No. 34,613. EUGENE M. and JAMES E. MIX, of Ithica, N.Y., assignors to Wait T. Huntington and Harvey Platts, of same place, for an "Improvement in calendar clocks."

"We claim the day-of-the-month wheel F, having three of its thirty-one teeth progressively shorter than the remaining twenty-eight, and applied to operate substantially as herein specified."

No. 34,614. GEO. W. RICHARDSON, of Grayville, Illinois, assignor to himself and George M. Weed, of same place, for an "Improvement in harvesters."

"I claim the finger-bar D, segment *b*, and plate E, formed of one piece of metal or of detached pieces connected together and fitted on the axle *a* of the driving wheel A, when said parts are combined or arranged in relation with the draught pole C, fitted on the axle *a*, and used in connection with the pin *j*, or its equivalent, as and for the purpose herein set forth."

No. 34,615. ALEXANDER SHANNON, of New York, N.Y., assignor to himself, T. W. Weathered, and E. B. Cheveroy, of same place, for an "Improvement in cartridges for fire arms."

"I claim the perforated diaphragm or diaphragms (*c*, *d*,) producing a sectional charge, as and for the purpose specified."

No. 34,616. FRANCIS W. SMITH, of Philadelphia, Pa., assignor to S. S. White, of same place, for an "Improvement in manufacture of dentists pins."

"I claim the construction of the dies *d*, *e*, and their arrangement relatively to the cutters *e*, *f*, and the punch *b*, substantially as herein specified."

No. 34,617. JAMES A. WELSH, of Xenia, Ohio, assignor to himself and R. McC. Davidson, of same place, for an "Improved cylinder for grain scouring and thrashing machines."

"I claim a cylinder A for a grain thrashing or scouring machine provided with trilateral shaped teeth, and having its outer side cast with a chill B, as and for the purpose set forth."

No. 34,618. NELSON B. WHITE, of South Dedham, Mass., assignor to himself and Wm. B. Rhoads, of same place, for an "Improved clothes wringer."

"I claim as improvements in clothes wringing machines operating the rolls C and D by gears, one of which is moved vertically by the shaft of the roll which rises and falls, substantially in the manner specified. 2nd, I claim the frame F, or its substantial equivalent, through which the power of the spring *e* is brought to bear on the roll which rises and falls, for the purpose set forth."

No. 34,619. JOHN P. COMBY, of Dayton, Ohio, for an "Improvement in treating flax and hemp to make them resemble cotton."

"I claim cutting flax or hemp straw before it is broken, so as to separate the seed ends from the residue of the stock, and divide the fibre into equal or nearly equal lengths suitable for spinning by ordinary cottom spinning machinery, as and for the purpose herein specified."

RE-ISSUES.

No. 1284. T. B. BLEECKER, of New York, N.Y., assignor to N. Y. Wire Railing Company, of same place, for an "Improvement in folding bedsteads." —Patented 17th April, 1847. — Re-issued 24th July, 1860, and extended.

"Claims.—1st, the folding frame hinged in the centre and setting within the corner posts, when such frame is connected directly to the posts themselves by journals or bolts on which the parts turn in folding or unfolding, as set forth. 2nd, the hooked shaped ends to the side rails of the frame hinged in the centre taking bolts or journals attached to the posts and forming hinges for the same, or for allowing said frame to be disconnected from the posts as specified. 3rd, in a bedstead wherein a frame is employed that is hinged to fold, as set forth, and hinged at its ends directly to the posts, the use of a fastening or brace that retains the hinged frame and posts in their proper relative position, as set forth. 4th, in a bedstead where the head and foot guards are constructed substantially as specified, and the bottom is made of a frame hinged to fold in the centre, as set forth, locating the journal or bolt (*b*) on the post so that the bedstead when folded will stand upright, as specified."

No. 1285. S. H. MILLER, of Hanoverton, Ohio, for an "Improvement in governors for steam engines." —Patented 14th September, 1860.

"I claim the employment, in combination with the within described system and arrangement of sliding sleeve B, arms E, E^1, balls F, F^1, and links D, D^1, of a spring or springs applied to operate substantially as and for the purpose herein specified."

DESIGN.

No. 1548. HENRY HEBBARD, of New York, N.Y., for a "Design for spoon or fork handles."

EXTENSION.

No. 5459. ROBERT HILLSON, of Albany, N.Y., for an "Improvement in hot-air furnaces."—Patented 29th February, 1848.

"I claim, 1st, the invention of a grate with a hemi-spherical or conical projection or boss rising upwards in the centre

thereof, the part of the grate outside of said boss being flat, as an improvement upon former grates, which are either flat or hemi-spherical or hemi-cylindrical, both the flat part and projecting part of my grate being grated. 2nd, I do not claim the bed-plates, nor do I claim a circular coal grate or sifting grate moving circularly in an opening made in the bed plate, but what I claim is the use of the circular rim which rests upon a circular opening in the bed-plate, and moves circularly thereon, and upon which the grate hanges by pivots resting on sockets in the rim, as above described, as an improvement upon the former mode, by which the grate rested by its sockets immediately on the bed-plate. 3rd, I claim the manner described of dumping the grate by means of the cross-bars and handles, and the ways or projections for the cross-bars to move upon, the grate being suspended in the manner set forth. 4th, I claim the separate air chamber marked A, Fig. 1, constructed against the side of the lower cylinder, which may be extended to the top of the upper cylinder for the purpose of heating an adjoining room, as described above. 5th, I claim the connecting of the part of the furnace below the fire by means of a continuous air passage and pipe with the room to be heated, so as to draw from that room solely the air for the support of the fire, for the purpose of creating a draft into that room of the hot air from the furnace, as above described. 6th, I do not claim the cylindrical box or drum called the hot air circular and represented in Fig. 5, nor do I claim the smoke circular represented in Fig. 6, but I claim the combination of the smoke circular with this cylindrical box or drum, in the manner and for the purposes described."

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 11th March 1862, and each bearing that date.

No. 34,620. Chas. F. Baxter. of Boston, Mass., for an "Improvement in filters."

"I claim as my improvement an air chamber so connected with a filter or filtering medium as to remove the collected impurities of filtration, substantially as described."

No. 34,621. Alexander Birkhole, of Hartford, Conn., for an "Improved composition metal of iron, zinc, and copper."

"I claim the introduction of cast iron into a composition composed of copper and zinc in about the proportion, substantially in the manner as described."

No. 34,622. Samuel Colahan, of Cleveland, Ohio, for an "Improvement in hay press."

"I claim the special arrangement of the chain or rope M, pulleys L, L^1, sheave O, and windlass P, in combination with the lever R, pawl and ratchet wheel U, T, and bottom K, when these parts are arranged and operated as and for the purpose specified."

No. 34,623. L. O. Colvin and G. H. Garden, of Philadelphia, Pa., for an "Improvement in telegraphing by light."

"We claim the combination of a lantern or other illuminating apparatus, a reflector, a shutter, and an electro magnet, to operate substantially as and for the purpose herein specified."

No. 34,624. G. W. Cook and Z. E. B. Nash, of Saint Paul, Minnesota, for an "Improvement in pumps."

"We claim, 1st, the warped flange *a*, in combination with the pipe *f*, and cylinder or water chamber *m*. 2nd, the double acting slide or swing valve *b*, in combination with the flange *a* and chamber *m*. 3rd, the extra pipe *g*, in combination with the flange *a* and chamber *m*, the whole being constructed and operated in the manner and for the purpose described."

No. 34,625. D. A. Courter, of Beloit, Wis., for an "Improvement in combining a pistol with a sword."

"I claim, 1st, combining with a sword a pistol with a transverse sliding breech piece. 2nd, the hollow breech extending beyond the breech piece, for the purpose of holding and guiding the same. 3rd, combining the guard of the sword hilt with the hollow breech."

No. 34,626. Alfred B. Ely, of Newton, Mass., for an "Improvement in chain shot for ordnance."

"I claim the projectile constructed in sections held together by bands that are to be ruptured by the explosion of the charge of the gun, and this only when the sections are held by a chain contained within the projectile."

No. 34,627. O. F. Fitch, of Morristown, Indiana, for an "Improved fruit can."

"I claim the clamp E, in combination with the stopper D, and india rubber strip C, in the manner and for the purpose herein set forth and described."

No. 34,628. John Gault, of Boston, Mass., for an "Improvement in chain shot for ordnance."

"I claim, 1st, the combination of the hollow sectional projectile connected with a chain, or its equivalent, enclosed and carried within itself, and the charge regulated by the fuse, to extend its sections at any desired point, as set forth. 2nd, I claim the securing the sections of the projectile at its front end or point, with a cap or nut, or its equivalent, as described and for the purposes set forth."

No. 34,629. Alexander Farcher Gray, of Belleville, Ill., for an "Improvement in water elevators."

"I claim the combination and arrangement of the cylinder A, with the recoiling plate and arms B, *b*, *b*, ratchet wheel and gudgeon G, the flat chain H, the mode of fastening the rope at I, the form of the bail J, for the attachment of the chain H, the peculiar shape of the ears or hooks K, *k*, adapted to the tilting rod L, and the shape of the tilting rod and its mode of attachment at M, *m*. I also claim the plate N, on the upper edge of the inside wall of the trough, in combination with the bottom of the trough O, inclining to the corner P, and the form of the box using the scale which accompanies the drawings as a guide for its proper construction, the whole being constructed, arranged, and operating substantially as herein described for the purpose set forth."

No. 34,630. Isaac A. Green, of Henry, Ill., for an "Improvement in cultivators."

"I claim, 1st, these four features combined in one machine in the manner described. The first feature consisting of the main frame, the bowed and cranked axle, and driver's seat, arranged in respect to each other as described. The second consisting of the arrangement of the tongue G, the lever H, and the driver's seat J, in relation to each other, as set forth. The third consisting in making the main frame in two parts, arranging and elevating the drivers seat J, and the frame E, E, L, L, and N, thereon, and the bow of the axle therein, as set forth. The fourth feature consists of the bars O, O, the frame E, E, L, L, and N, the swivel I, and the main frame, arranged in relation to each other as set forth."

No. 34,631. Lenard A. Green, of Rocky Hill, Conn., for an "Improvement in line holders for mason work, &c."

"I claim, 1st, the employment of the brackets *b*, *b*, combined with line *a*, for holding and easily adjusting it (the line) in its proper place. 2nd, I claim the pad *s*, brackets *b*, *b*, and line combined, as and for the purpose described. 3rd, I claim the combination of the ratchet *e*, spool *f*, brackets *b*, *b*, line *a*, substantially as and for the purpose described."

No. 34,632. W. H. Gwynne, of Brooklyn, N.Y., for an "Improved apparatus for making water gas."

"I claim the distributing box B, with its circulating and heating passage D, and its perforated cover or top C, the whole operating substantially as herein described and shown for the purpose set forth."

No. 34,633. James Harper, of East Haven, Conn., for an "Improvement in machinery for making paper."

"I claim, 1st, the combination with the Fourdrinier wire cloth apron B, and the couching felt G, so arranged as to couch the paper from the wire cloth by direct contact of the perforated cylinder E, when these parts are so arranged that the cylinders E and H support the wire cloth B and the couching felt G respectively, directly opposite their point of contact with each other, substantially as set forth. 2nd, the combination with each other, when arranged as above described, of the Fourdrinier cloth B, couching felt G, and beater N, substantially as set forth."

No. 34,634. Henry Hayward, of Chicago, Ill., for an "Improvement in safety paper."

"I claim the within described means of designating varieties in the value or character of printed sheets of paper in which threads of fibrous material are incorporated into and among the pulp, as herein described, to wit, the use of threads of different colors or characters, arranged substantially as specified."

No. 34,635. John D. Ehlers, of Baltimore, Md., and James P. Herron, of Washington, D.C., for an "Improvement in pantaloons."

"We claim, in the construction of pantaloons and drawers, making a fall B on the posterior portion thereof, and securing the same to the waist A of the pantaloons or drawers, substantially as described."

No. 34,636. David A. Hopkins, of Brooklyn, N.Y., for an "Improvement in railroad car journal boxes."

"I claim, 1st, the combination of one or more springs with a movable plate bearing against the whole or a part of the diaphragm, substantially as set forth, for the purposes stated. 2nd, the grooving of the stop bar, substantially as shown and described, for the purpose set forth. 3rd, the construction of the friction plate with a flange at each end thereof, in combination with a removable seat or support, when said plate and support are constructed and combined substantially as shown and described for the purposes stated."

No. 34,637. Amos Krotzer, of Woodville, Ohio, for an "Improved clothes dryer."

"I claim the combination and arrangement of the frames *a*, *d*, cord *b*, hinges *c*, and catches *e*, substantially as and for the purpose specified."

No. 34,638. Wm. Mentzel and Alex. and J. W. Geddes, of Baltimore, Md., for an "Improvement in lamps."

"We claim the jacket tube *a*, *a*, *a*, *a*, as described, in combination with the perforated bottom E, E, and outside cap F, forming an air chamber for regular drafts of heated air through the perforations of the jacket tube *c*, *c*, for the supply of oxygen at the point of combustion."

No. 34,639. C. Messenger, of Warren, Ohio, for an "Improved clothes wringer."

"I claim the special arrangement of the adjustable clutch L, clutch B^1, springs S, cross bar K, adjustiug screw P, in combination with the adjustable endless apron R, and rollers G and H, when operating conjointly in the manner and for the purpose set forth."

No. 34,640. Martin Miller, jr., of Vienna, empire of Austria, for an "Improved mode of electroplating steel wire for piano strings and other purposes."

"I claim the production of steel or other music wire provided with a copper, silver, gold, or other metallic coating, substantially in the manner and for the purposes herein set forth."

No. 34,641. Henry Morse, of Natick, Mass., and Dan Perry, of Attleborough, Mass., for an "Improvement in water elevators."

"We claim the arrangement and combination of a hoisting chain and a hoisting wheel with openings through its rim for the escape of the water, substantially as described. 2nd, we claim the construction and arrangement of the hook K, when hung in the manner and for the purpose substantially as specified."

No. 34,642. E. S. Muringer, of Philadelphia, Pa., for an "Improved concentrated food or beef tea."

"I claim the concentrated food or beef tea above described, when prepared in the manner substantially as specified."

No. 34,643. Joseph Nason, of New York, and Robert Briggs, of Brooklyn, N. Y., assignors to said Joseph Nason, for an "Improvement in steam radiators."

"We claim the method as herein substantially described of constructing the tubes of steam radiators and condensers, with an interior diaphragm or dividing plate, or its equivalent, an interior tube, in combination with a single steam chamber."

No. 34,644. Daniel B. Neal, of Mount Gilead, Ohio, for an "Improvement in evaporating pans for saccharine juices."

"I claim the employment of the pan constructed as described, of combined sheet and cast-iron, whereby the syrup may be boiled at a lower temperature, with the same fire, than the juice, as is herein specified."

No. 34,645. Resolved Read, of Brockport, N.Y., for an "Improvement in machines for cleaning and assorting beans."

"I claim the combination of the hexagonal screen constructed as described, flanges *e*, *e*, spouts *m*, *n*, *o*, and case D, feed hopper H, spout I, and disk K, when arranged and operating as and for the purposes above set forth."

No. 34,646. N. A. Rhoads, of Waterbury, Vt., for an "Improved clothes wringer."

"I claim in a clothes wringing machine, provided with elastic rollers, the construction of either or both of such rollers, or in other words the arrangement of their operating surfaces, so that they may be at a greater distance asunder at their middles than at their ends, the whole being substantially in manner and for the purpose as herein described. I also claim the arrangement and combination of the connection and bearing bar G, with the rubber springs *g*, *g*, the shaft H, and its cams *l*, *l*, the whole being applied to the frame A, and its rollers D, D^1, as described. I also claim the application of each of the bars J, J, with the frame A, by means of an adjustable fulcrum screw *i*, whereby the distances of the bar J, and the bearing head of the screw from the frame A, may be increased or diminished as circumstances may require. I also claim the arrangement of the shaft L, and its cams *p*, *p*, with reference to the rollers D, D^1, the frame A, and the two bars J, J, or their equivalents, affixed to the said frame."

No. 34,647. Elisha Robbins, of Milford, Mass., for an "Improvement in picker motion for looms."

"I claim my improved arrangement of the radius arm E, its spring F, and the guides *g*, *g*, viz. within the support piece D, and the rocker C, whereby they are covered and protected from dust and accidental displacements or injury. Also the arrangement of the heel guide or back stop *i* with the rocker and the support piece. Also the arrangement and combination of the oil cups with the rocker, the support piece and the radius arm applied to the latter and the rocker."

No. 34,648. H. C. Sherman, of Buffalo, N. Y., for an "Improved condenser for stills."

"I claim, 1st, making the condenser of zigzag condensing pipes, arranged side by side in sections, and parallel to each other (or nearly so), each section opening in and connecting to a transverse supply pipe at the top, and a transverse discharge pipe at the bottom, for the purposes and substantially as described." 2nd, I claim the combination of the sections B, C, D, with the transverse discharge and supply pipes E and F, each transverse pipe having short pipes b^1, c^1, and d^1, &c., and b^2, c^2, d^2, &c., to admit of an easy connection and disconnection of the sections thereto, for the purposes and substantially as set forth. 3rd, I claim the combination and arrangement of the perforated cold water feed pipe H, with a condenser constructed in sections substantially as set forth."

No. 34,649. Charles W. Smith, of New York, N. Y., for an "Improvement in friction matches."

"I claim the use of a paraffine in the manufacture of matches in the manner and for the purposes herein described."

No. 34,650. Robert A. Smith, of Newburyport, Mass., in fences."

"I claim my mode of constructing each fence section in order that two or more of them may be arranged and combined as specified, the said mode consisting in making it with two interlocking projections and with the mortise arranged in each end of it, substantially as specified. I also claim the combination and arrangement of the connecting bar D, with two fence sections, when constructed, interlocked, and arranged together substantially in manner as hereinbefore set forth."

No. 34,651. John A. Southmayd, of Jersey City, N. J., for an "Improvement in vacuum pans for evaporating."

"I claim the plunger or lifter when constructed and operated in combination with evaporating pans as herein above specified. I also claim evaporating pans constructed and arranged in the manner and for the purpose herein above set forth. Lastly, I claim the condenser and pump, constructed in the manner described, in combination with pans used for evaporating purposes."

No. 34,652, H. N. Stearns, of Chardon, Ohio, for an "Improvement in churn dashes."

"I claim, 1st, a horizontal churn dasher, consisting of a crank shaft F, arms A, metallic wires C, and rods B, all combined and arranged in the manner set forth. 2nd, stretching the wires C between the arms A, by soldering the said wires to thin metallic plates D, and securing the latter within the arms A, as explained."

No. 34,653. Zadok Street, of Salem, Ohio, for an "Improved cement and tile roofing."

"I claim a roof composed of a rigid body of any suitable material laid in and covered by cement compounded substantially as herein set forth."

No. 34,654. Wm. R. Thomas and Morgan Emanuel, jr., of Catasauqua, Pa., for an "Improved blasting powder."

"I claim the blasting compound made of nitrate of soda, sulphur, ground bark, and chlorate of potash, in the manner substantially as and in about the proportions herein set forth."

No. 34,655. M. and S. G. Tufts, of Mainville, Ohio, for an "Improved apparatus for evaporating sugar juices."

"We claim, 1st, the arrangement and combination of two or more sets of swinging adjustablo pans E, E^1, G, G^1, with the flue C, heater A, and furnace B, all constructed, operated and operating, substantially in the manner and for the purpose shown and described. 2nd, the combination with the pans E, E^1, G, G^1, of swinging levers F, H, and transversely moving carriages *d*, *h*, substantially as and for the purpose specified. 3rd, the arrangement of the continuous open flue C, and dampers I, I^1, in combination with the pans E, E^1, G, G^1, as and for the purpose set forth."

No. 34,656. Maurice Vergnes, of New York, N. Y., for an "Improvement in liquids for exciting galvanic batteries."

"I claim the preparation and production of a fluid for use in galvanic batteries in the place of nitric acid, composed or prepared with a solution of the two salts, bichromate and chlorate of potash, in connection with peroxide of manganese, treated with sulphuric acid as described, the whole prepared substantially as set forth."

No. 34,657. Richard Vose, of New York, N. Y., for an "Improvement in car springs."

"I claim an improved compound spring produced by interposing a packing of elastic gum or the equivalent thereof, between the coils of a spiral or a helical metallic spring substantially in the manner herein set forth."

No. 34,658. Charles J. Woolson, of Cleveland, Ohio, for an "Improvement in cooking stoves."

"I claim the use of an inside fire door or movable plate attached by hinges to the inside upper corners of the front door frame of cooking stoves, and by catches to the front edge of the horizontal lower fire grate, so as to retain the fuel in its place for the purpose of roasting, and to allow the inside door to be swung outward and upward that coals may be drawn from the fire for the purpose of broiling."

No. 34,659. Charles Wright, of Newark, N. J., for an "Improvement in tool posts or holders."

"I claim a tool post or holder constructed in the manner and for the purpose as herein above specified."

No. 34,660. Geo. Cessford, of Utica, N. Y., assignor to John S. and Meritt Peckham, of same place, for an "Improvement in stove dampers."

"I claim the combination and arrangement of the register plate A, the damper B, and the expansion rod F, all constructed and operating substantially as described."

No. 34,661. Patrick Foy, of New York, N. Y., assignor to himself and John Fitch, of same place, for an "Improvement in apparatus for boring and rifling cannon."

"I claim, 1st, the head block *g*, provided with the adjustable ring 4, pin 6, and stop *q*, together with the frame *c*, and driving gearing, in combination with the screw *i*, and spirally grooved cutter stock *h*, the whole arranged and acting in the manner and for the purposes substantially as specified. 2nd, I claim the guiding segments S, S, and plate *t*, arranged and acting as and for the purposes set forth. 3rd, I claim the auxiliary shaft (*u*), provided with the gearing (*v*, *m*,) in combination with the tool or cutter stock (*h*), and screw *i*, with their respective gears (*w*, *l*,) substantially as and for the purposes specified."

No. 34,662. W. T. Grant, of Jacksonville, Ill., assignor to himself and James S. Snyder, of same place, for an "Improvement in machines for grading and excavating."

"I claim, 1st, the arrangement of the tongue S and truck M, with the driver's seat R, and the oscillating adjustablo lever P, as herein shown and described. 2nd, the arrangement of the two parts of the main frame *d*, *e*, with each other, in the manner herein shown and described, so as to be separately self-adjusting in respect to the surface of the ground, all as set forth."

No. 34,663. Gustavus Hammer, of Cincinnati, Ohio, assignor to Holstein and Hammer, of same place, for an "Improved machine for framing oval mouldings."

"I claim, 1st, in combination with stops F, F, and feed wheel E, the outer frame H, or its equivalent, surrounding frame I, and having a contour differing from the same, when so adapted to stops F, F, and the form of frame I, as to cause the latter to be fed under cutter head B, appropriately thereto, substantially as described. 2nd, I claim the arrangement of standard G, brackets *f*, small sleeves *g*, *h*, spring *l*, and lever *n*, substantially as and for the purpose set forth."

No. 34,664. Philander Shaw, of Boston, Mass., assignor to Charles E. Hodges and N. D. Silsbee, of same place, for an "Improvement in writing tablets."

"I claim a tablet formed of wood compressed to resist the indenting action of pencils or crayons, and covered on one or both surfaces with a preparation, having a suitablo tooth to receive marks from crayons or pencils; also such a tablet, when formed by compression, so as to leave a raised border or frame on and around one or both surfaces of the tablet, and integral with it."

No. 34,665. Thomas J. Young, of Philadelphia, Pa., assignor to himself and John Elder, of same place, for an "Improvement in counting machines."

"I claim the numbering wheels 1, 2, 3, &c. with their projections, and the plates G, G, in combination with the cog wheels 7, 8, 9, &c. and the plates I, when the said plates G and I are prevented from turning by the rods H and J, or their equivalents, and when the whole of the plates and wheels are acted on by the spiral springs, or their equivalents, as and for the purpose herein set forth."

No. 34,666. Richard Montgomery, of New York N.Y., for an "Improvement in ordnance."

"I claim, 1st, encasing a longitudinally corrugated cylinder, with a series of corrugated layers divided transversely in sections, the corrugations of which fit into each other, and run around in the direction of the curves of the arch, as described. 2nd, in combination with the outer and inner cylinder thus formed, I claim the use of the hollow tubes on bars (*a*, *a*, *a*, *a*,) as and for the purposes set forth. 3rd, in conclusion with the outer and inner cylinder thus formed, I also claim the mode herein described of securing the several parts thereof to each other, and to the breech of the cannon, that is to say, the bolts (*e*) and (*f*), arranged as set forth."

Re-issues.

No. 1286. Charles Mettam, of New York, N.Y., assignee of Samuel Nowlan, of same place, for an "Improvement in galvanic soles."—Patented 18th June, 1861.

"I claim, 1st, the formation of articulated electro-voltaic plate work in sections as described throughout the whole or major portion of its area, so as to give to the same a general pliability, and formed of copper and zinc plates, or their equivalents, essentially as described, and the several sections of negative and positive plates being united in separate relations to their contiguous sections by a flexible insulating strip or strips, substantially as specified. 2nd, uniting the several sections of articulated electro-voltaic plate work by means of eyelets, or their equivalents, substantially as herein set forth. 3rd, the employment of a skeleton flexible insulator for uniting the several sections of articulated galvano-electric plate work."

No. 1287. Jesse A. Crandall, of New York, N. Y., for an "Improved rocking toy."—Patented 17th May, 1859.

"I claim the combination of the body A, whether made in the form of a hobby horse, or of a toy of other description of the class herein described with the base B, B, and a spring or springs C, for producing a rocking movement, as and for the purpose described."

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 11th March, 1862, and each bearing that date.

No. 34,667. Ellen B. Boyce, of Green Point, N.Y., for an "Improved washing machine."

"I claim the arrangement as described, and in combination with each other, of the corrugated or ribbed and grooved bottom 1, corrugated or ribbed sides 2, corrugated or ribbed centre piece 3, lever 4, rings 5, 5, and rounds or slats 6, as set forth, for the purpose specified."

No. 34,668. R. D. Cary, of Philadelphia, Penn., for an "Improvement in sweeping machines."

"I claim, 1st, combining and arranging one or more brooms I, with the travelling wheels of a wagon or cart, or with intermediate gearing, substantially as described, so as to give a sweeping movement to the brooms, substantially as and for the purpose set forth. 2nd, the lugs *i*, *i*, *i*, *i*, or their equivalent, constructed and arranged in relation to the connecting rods M, substantially as described, for the purpose of raising the brooms in their backward movement as above set forth. 3rd, the arrangement of central brooms N, with the side brooms I, or in lieu thereof, substantially in the manner and for the purpose set forth. 4th, the combination and arrangement of scrapers with a sweeping machine, substantially as described, for the purpose set forth. 5th, combining and arranging the sprinkling tube O, with a sweeping machine, substantially in the manner described, for the purpose set forth."

No. 34,669. Nathan Chapin, of East Saginaw, Michigan, for an "Improved apparatus for the manufacture of salt."

"I claim, 1st, submerging a doubly inclining floor in a vat of brine, with its two margins elevated to the surface, separating the brine in two bodies, upper and lower, while the heat therein is connected through the floor, and combining with said floor metallic partitions for transmitting heat direct through said partitions and brine from the more heated to the less heated sections of the vat, for rapid equalization of temperature, while the brine is thereby detained to a moderate flow in passing from one end of the vat to the other. 2nd, I claim adding to said combination submerged furnaces in both bodies of brine, parallel with each other, for cleansing in the lower while granulating in the upper body as described. 3rd, I claim adding still to this combination perforated covers over a steam chamber, connecting said incline plane floor with the salt bins for draining chlorides from the salt after raking, and before dumping into the bins. 4th, I claim combining with this entire apparatus opening covers over the building, enclosing it for solar assistance in artificial evaporation, as described. 5th, I claim placing partitions upon the sides of my submerged furnaces as described, for preventing the boiling brine thereon from mixing with the main body, and interfering with its quiet precipitation of impurities."

No. 34,670. James Cochrane, of Harburn, Scotland, for an "Improvement in wet gas meters."

"I claim the enclosing of the float of the gas inlet valve in a special chamber or compartment, which is separate and distinct from the main water or measuring chamber of the meter, and the introduction of the lower end of the water supply pipe into such separate chamber, for the purpose herein-before described."

No. 34,671. A. Colburn, of Leominster, Mass., for an "Improved mode of attaching horses to vehicles, and detaching them therefrom."

"I claim, 1st, the mode herein described of attaching horses to vehicles by means of the draw bar C, draw pins D, and double slotted plates E, I, J, when combined and arranged to operate as set forth. 2nd, the combination of the strap H, ring *f*, draw bar C, spring *e*, and slotted plates E, I, J, when arranged to operate in the manner and for the purpose set forth,"

No 34,672. Albert O. Crane, of Hoboken, N.J., for an "Improved convertible boat, bridge, and tent."

"I claim the combination of the uprights or supports E and canvas F, with a folding boat A, A^1, *c*, *c*, constructed substantially as and for the purposes explained, either with or without the canvas B. I also claim the adjustable row-locks C, fitted loosely in the bars e^1, and employed in connection with buttons D pivoted to the bars *g*, as and for the purposes set forth. I further claim securing the end pieces *c*, *c*, and sides A^1 of the boat in proper position by means of the sockets *j* at the ends of the sides A, and the cross bars *i* on the outer parts of the end pieces *c*, *c*, in connection with the hooks and staples *k*, *l*, substantially as shown and described."

No. 34,673. William H. Deviar, of Valley Township, Missouri, for an "Improved amalgamator for gold and silver."

"I claim forcing the pulp containing the precious metal up through the column of mercury, substantially in the manner described, for the purpose specified."

No. 34,674. William Ebbitt, of New York, N.Y. for an "Improvement in boxes for car axles."

"I claim the employment of the chilled iron bearing *f* for the axle (*a*), fitted and acting substantially as and for the purpose specified. I also claim the metallic collar (2), permanently formed on or attached to the axle *a*, when enclosed within the chamber *e*, that has an opening at the bottom, said collar forming a centrifugal dust and dirt excluder, as and for the purposes set forth."

No. 34,675. E. Edwards and Joel Cowee, jr., of Keene, N.H., for an "Improvement in machines for cutting chair backs."

"We claim the combination and arrangement of the oscillating cutting tools B, B, the revolving table A, and patterns C, C, operating substantially as and for the purpose set forth."

No. 34,676. Thaddeus Fairbanks, of St. Johnsbury, Vermont, for an "Improvement in platform scales."

"I claim, 1st, securing the pillar B to the base, and supporting it in both the upright and horizontal positions by means of the lugs D, E, and ears *a*, or their equivalents, substantially in the manner herein described. 2nd, the employment of the dog F in combination with the folding pillar B, for the purpose of readily securing and releasing the latter when in the upright position. 3rd, folding the beam K and its attachments against or within the pillar B, substantially as and for the purpose herein set forth. 4th, the double-acting cap bolt N, in combination with the folding cap H and pillar B, for fastening the said cap H in both the folded and extended positions by the same bolt, substantially as herein specified. 5th, the combination of the loop or handle *g* and screw G for tightly confining the pillar B to the base when in the folded condition, substantially as herein shown. 6th, stowing and confining the poise W within a pocket or recess P in the platform, substantially as and for the purpose herein set forth."

No. 34,677. Joseph Firmenich, of Buffalo, N.Y., for an "Improvement in dermopathic instrument."

"I claim a dermopathic instrument constructed substantially as described, having a cylinder or cup which contains the puncturing needles and a medicinal preparation in contact with the needles, so that the skin of the patient may be punctured and the medicine infused at one operation of the instrument, as set forth."

No. 34,678. Joseph E. Fisk, of Salem, Mass., for an "Improvement in dry gas meters."

"I claim, 1st, the vertically vibrating rod or rods I, in combination with the diaphragm or diaphragms of a gas meter, for the purpose set forth. 2nd, the detachable gas valve chest D^1, constructed as described, in combination with the diaphragm chambers and the gearing chamber, for the purpose set forth. 3rd, the combination with a valve M, operated substantially as herein described, of the vibrating rods (I) of the diaphragms, and the connecting arms K of the crank shaft L, for the purpose set forth. 4th, the flexible sleeves J, substantially as and for the purpose set forth. 5th, attaching the diaphragm C to the vertically vibrating rod I by means of the cross *c* on the end of the rod, and the connecting links *e, e, e, e,* in the manner and for the purpose described. 6th, the thimble socket *g*, and rocking journals *f* of the vibrating rod, for supporting the diaphragms, and allowing the rod to vibrate, substantially as described."

No. 34,679. Wm. A. Foster, of Fitchburg, Mass., for an "Improvement in the means of operating cut-off valves."

"I claim operating the cut-off valve by the link F, which operates the main valve, substantially in the manner specified."

No. 34,680. Michael Galvin, of Scranton, Pa., for an "Improvement in hand tenoning machines."

"I claim the combination of the sliding scale B, stop I, thumb screw J, with the box A, cap C, and clamping screws D, E, when arranged and operating in the manner and for the purposes described."

No. 34,681. Daniel Gilbert, of Middlefield, N.Y., for an "Improvement in wheel vehicles."

"I claim the rotating axles H, M, with the friction roller bearings F, F, G, G, in combination with the wheels O, placed loosely on the arms *a* of the axles, as and for the purpose set forth."

No. 34,682. B. D. Godfrey, of Milford, Mass., for an "Improvement in india-rubber boots and shoes."

"I claim a double india-rubber sole for boots and shoes, the two portions being each vulcanized in a mould, and so formed that their surfaces of contact shall be exactly adapted the one to the other, and will adhere to each other when the cement is applied, without being held pressed together, for the purpose specified."

No. 34,683. Earl Guyer, of Wolcott, Vermont, for an "Improvement in stoves."

"I claim, 1st, an auxiliary stove with hollow non-conducting walls made in two parts, and with hinged side and top doors, and with a passage for a draft flue, for use in connection with an ordinary cook stove, in the manner herein described. 2nd, in a non-conducting auxiliary stove, which is capable of being wholly removed from an ordinary cook stove, after having been made to envelope the same for a season, I claim the combination of the front stationary fender portion U, and the top and side hinged portions B,D,D, whereby the top of the stove can be exposed at top and sides, and the cook at the same time shielded from the intense heat, as herein described."

No. 34,684. Earl Guyer, of Wolcott, Vermont, for an "Improvement in saw mills."

"I claim the combination of the inclined rails I, I^1, lever arrangement L, L, M, N, and attachments *m, n, r,* Q, R, of the carriage E, substantially as and for the purposes set forth."

No. 34,685. John M. Hathaway, of New York, N.Y., for an "Improvement in explosive shell for ordnance."

"I claim, 1st, the arrangement of the diverging barrels *g, g,* connected together at their base by the cirular groove 8, surrounding the chamber *h*, and fired in the manner specified. 2nd, I claim the lead ring *c*, provided with a corrugated sheet metal band, in combination with the circular and longitudinal grooves (4) at the tapering end of the bomb, as and for the purposes set forth. 3rd, I claim the elastic base (*b*), in combination with the tapering corrugated metal (*d*), in the manner and for the purposes specified. 4th, I claim the disk (*e*) through which the fuse (*i*) passes, when fitted as set forth, to regulate the length of said fuse, as specified. 5th, in combination with the base *b* and disk *e*, I claim the pin *f*, divided washer 6, and conical ring 7, for the purposes set forth. 6th, I claim the tapering sheet metal spring (*l*), constructed as specified, and applied to sustain the detonating plug (*k*), as set forth. 7th, I claim the rollers (2, 2), arranged and applied as shown, to take the rifling grooves, for the purposes specified."

No. 34,686. T. A. Havemeyer and Henry Schinitzspan, of New York, N.Y., for an "Improved carriage for sugar moulds."

"We claim, 1st, the adjustable plates G, H, provided with arms *f*, f^1, and arranged or applied to the carriage, substantially as and for the purpose herein set forth. 2nd, in combination with the adjustable plates G, H, the frame A, provided with recesses *k* to receive the tips *l* of the moulds, as specified. 3rd, providing the frame A with a recess *e* at its front part or end, as shown, when said recess is used in connection with a hollow post E, to receive the arbor *c* of the caster wheel C, and said post is attached to frame A to support the front ends of the plates G, H, as set forth. 4th, the combination, construction, and arrangement of the parts herein shown and described, to operate as and for the purpose specified."

No. 34,687. M. L. Horton, of Claremont, N. H., for an "Improved mop head."

"I claim the combination of the parts A and C, and adjusting them or firmly holding them in any required position by means of the ratchet arm B, dog E, and spring (*d*), operating as described, and for the purposes set forth."

No. 34,688. John Jay Johnson, of Kalamazoo county, Michigan, for an "Improved tanning process."

"I claim the employment of the liquor, compounded of fermented bran water, common salt, and sulphuric acid, substantially in the proportions and manner specified, and its combination with the solution of lime and wood ashes in water, and with the stuffing of fish oil, alcohol, flour paste, and tallow, substantially in the proportions and manner herein set forth."

No. 34,689. C. Meyer, of New Brunswick, N.J., for an "Improvement in boots and shoes."

"I claim so extending the width of the shank of a boot or shoe sole, that when applied to a boot or shoe, said sole shall form a lateral wearing protection on the back side of the boot or shoe, in the manner and for the purpose set forth."

No. 34,690. J. Millholland and J. J. Lahaye, of Reading, Pa., for an "Improvement in journal boxes."

"We claim, 1st, the cork packing J, and the detachable plate I, when both are arranged in the rear of the box, and confined therein by the recess *t*, and key D, as and for the purpose herein set forth. 2nd, the cork packing J, severed at one point, in combination with the strap *n* and spring *p*, the whole being constructed and arranged substantially as and for the purpose specified. 3rd, the cover E, having a recess *f*, filled with cork, and applied to the front of the box, in the manner and for the purpose specified. 4th, the hollow projection G, the lid H, with its dovetailed recess, containing the cork packing *k*, the spring for depressing the lid, the socket *l*, or its equivalent, the whole being arranged and combined with the detachable cover E, as and for the purpose herein set forth. 5th, the projections *v, v,* applied to the plate L, substantially in the manner and for the purpose specified."

No. 34,691. Richard Mohler, of Lancaster, Penn., for an "Improvement in smut machines."

"I claim the branch arch K, with its tube L, hopper V, and connecting neck *k*, when combined with the main arch and its chambers, as herein specified, for the purpose and in the manner set forth."

No. 34,692. William P. Parrott, of Boston, Mass., for an "Improvement in method of laying stone, &c. under water."

"I claim the above method, substantially as described, of laying stone wall or masonry under water."

No. 34,693. Terrence F. Reilly, of New York, N. Y., for an "Improvement in rotating projectile for smooth bored ordnance."

"I claim, 1st, so forming and arranging the projectile, the explosive material, and the interior of the gun, that the explosion shall act directly upon the shot, in such manner as to give it a rifle motion, substantially as herein set forth. 2nd, controlling the twisting or rifle motion of a projectile rotated within a smooth bored gun, as above described, by means of surfaces *b*, *b*, *c*, *c*, arranged to act upon each other, in the manner and with the effect herein set forth. 3rd, forming the parts B^1, B^1, or equivalents, abutments at the base of the bore of the gun upon a piece B, separate from the gun, for the purpose herein set forth."

No. 34,694. Joseph Rohmer, of Chicago, Ill., for an "Improvement in grain winnower."

"I claim, 1st, the arrangement of the adjustable partition L, sieves *g*, g^1, and fan D, constructed and operated as and for the purpose set forth. 2nd, the arrangement of the adjustable trap bottom B, connected with the sieve frame *e*, the arm *r*, strap l^1, and adjustable spring *z*, as and for the purpose above set forth."

No. 34,695. Frederic M. Ruschhaupt, of New York, N.Y., for an "Improved apparatus for preventing malt liquors from becoming flat."

"I claim the improved arrangement for the application of carbonic acid gas in the manner as described and for the purpose set forth."

No. 34,696. Titus H. Russell, of Northfield, Vermont, for an "Improvement in water wheels."

"I claim, 1st, the socket h^1, semisphere *i*, ring G, provided with the inclined surfaces *j*, and frame F, provided with the inclined surfaces *k*, in combination with the toothed segment H, and pinion I, all arranged as shown, for the purpose of raising and lowering the wheel D, and shaft E, as set forth. 2nd, the packing C, when applied to the wheel by means of the shoulder *e*, of the flanch *b*, of the case A, and the adjustable flanch B, connected to and arranged with flanch *b*, as shown, for the purpose of expanding the packing, and fitting it snugly and watertight around the wheel as described. 3rd, the chutes K, when constructed as shown and arranged relatively with the buckets *h* of the wheel D, to operate as and for the purpose specified. 4th, the arrangement with chute case M of the recesses *o*, concentric projections *p*, *p*, and radial projections *q*, as and for the purpose set forth. 5th, the strips or cleats O, attached to the annular gate L, in combination with the adjustable ways P, and friction rollers C^1, substantially as and for the purposes set forth."

No. 34,697. Gelston Sanford, of New York, N.Y., for an "Improvement in machinery for breaking and dressing flax or hemp."

"I claim the fluted roller or rollers having a positive planet motion substantially as described, in combination with a yielding fluted concave, substantially as and for the purpose described. I also claim the hatchel in combination with the fluted roller or rollers having a positive planet motion, and the yielding fluted concave, substantially as and for the purpose specified."

No. 34,698. Gelston Sanford and James E. Mallory, of New York, N.Y., for an "Improvement in machinery for breaking and cleaning hemp or flax."

"We claim combining the fluted bars substantially as herein described, for performing the compound operation of breaking and pounding flax or other like plants with springs, substantially as herein described, to render such compound breaking and pounding surfaces yielding and self-adapting, substantially as and for the purpose specified. We also claim, in combination with the fluted breaking bar, reciprocating by a positive motion, the making of the other or opposite breaking bar movable and connected with the frame by toggle-joint levers and treadle, or their equivalent, substantially as and for the purpose specified."

No. 34,699. Charles B. Sawyer, of Fitchburg, Mass., for an "Improvement in hot air furnaces."

"I claim, 1st, the employment or use for the purpose specified of a water chamber B, when applied substantially as described, either to the cold-air induction pipe or to the hot-air pipe A, of an air-heating furnace, at a point sufficiently remote from the furnace to prevent the water reaching the boiling point, as set forth. 2nd, the employment or use of a sponge C, or other suitable material, placed in the cold-air induction pipe or in the hot-air pipe A, of an air-heating furnace, to serve as a separator to free the hot air, or air to be heated, from dust and other light impurities which may be held in suspension in it, substantially as described."

No. 34,700. George W. Scollay, of St. Louis, Mo., for an "Improvement in burial cases."

"I claim, 1st, the continuous grooves *b* in the joints of the coffin for the purpose of cementing them and making them air-tight in the manner described for the purpose specified. 2nd, I claim combining a valve with a deodrizing chamber made in the coffin for the purpose of deoderizing the escaping gas, as described. 3rd, I claim the chamber *c*, in combination with the coffin, and with or without the valve *r*, and partition *d*, for the purpose of holding the deodorising material."

No. 34,701. Noah Shaw, W. B. Estabrooks, and C. A. Piper, of Eau Claire, Wis., for an "Improved shingle machine."

"We claim, 1st, the pivoted bar L, operated through the medium of the bars K, K, lever M, plates P, Q, and bolt carriage G, substantially as shown, for the purpose of adjusting the bolt from which the shingles are sawed, as herein set forth. 2nd, the employment or use in connection with the adjustable bar L of the rod *p*, provided with the flanch *r*, and fitted in the block J, for the purpose of regulating the width of the shingles, as specified. 3rd, in combination with the adjustable bar L, actuated or operated as shown and described the rod *s*, provided with the bar *u*, and arranged as shown, to serve as a support for the shingle being sawed. 4th, the two strips D, D^1, provided with upper bevelled or inclined surfaces, and arranged in relation with the saw E, and the space or opening *b*, in the carriage G, to operate as and for the purpose set forth."

No. 34,702. John Sloan, of Philadelphia, Pa., for an "Improved in-sole for boots and shoes."

"I claim an in-sole for boots and shoes made of a thin metal bottom and a thin wooden top, the two united together in the manner and for the purpose substantially as herein described and represented."

No. 34,703. C. Edward Sneider, of Baltimore, Maryland, for an "Improvement in revolving fire-arms."

"I claim, 1st, the employment in a revolver of two many chambered cylinders or series of revolving chambers arranged breech to breech upon the same axis pin substantially as and for the purpose herein described. 2nd, the combination of the guides *q*, *r*, *s*, with a pivoted hammer head F, employed in connection with a revolving chambered cylinder in the manner and for the purposes shown and explained."

No. 34,704. James F. Stevenson and Theo. B. Hammer, of McKee's Port, Penn., for an "Improvement in mode of lubricating axles."

"We claim the hub A, chambered recesses *a*, channels *e*, and thumb screw *g*, when combined and arranged to operate in the manner and for the purpose set forth."

No. 34,705. Albert Tracy, of U. S. Army, for an "Improvement in tompion for fire-arms."

"I claim, 1st, the tompion for small arms and cannon as shown in figures 1 and 2, and substantially as herein-before described. 2nd, I claim also the modification shown in figure 4, substantially as above described. 3rd, I claim also the tompion as claimed in the first and second claims, in combination with the removable key, substantially as above described, and shown in figure 5 of the drawing."

No. 34,706. Theodore Twickeler, of Boston, Mass., for an "Improvement in needle gun."

"I claim the arrangement of the catch lever O, the spring *i*, and the thumb lever I (furnished with a stud or shoulder V, as set forth) with respect to the needle bar carriage, and so as to operate in holding the spring *l*, in a compressed state in manner and under circumstances as described."

No. 34,707. George E. Van Derburgh, of Mamaroneck, of New York, for an "Improved oil-proof cask."

"I claim as a new article of manufacture a cask, a barrel, a keg, a firkin, or other style of vessel the inner surface of which has been rendered impervious to oil, turpentine, &c., by the single or repeated use of liquid silicate, substantially as herein set forth."

No. 34,708. Thomas Varney, of San Francisco, Cal., for an "Improved device for straining gold and silver amalgum."

"I claim the combination of the tub or vessel A, strainer C, and tube D, arranged to operate in connection with quicksilver, as and for the purpose set forth."

No. 34,709. Thomas Warker, of New York, N.Y., for an "Improved bottle for aerated liquids."

"I claim, 1st, the employment or use of a lining *e*, of glass or other suitable material, such as herein described, in combination with the metal fountain-head B, substantially in the manner and for the purpose herein specified. 2nd, the arrangement of the circular bed or shoulder *i*, on the top edge of the neek *a* of the bottle A, in combination with the alsernate vertical grooves and ridges *j*, *k*, as and for the purpose shown and described."

No. 34,710. R. A. Wilder, of Cressona, Penn., for an "Improvement in hoisting machines."

"I claim, 1st, the combination of the brake band, with the rings of wood, or other material substantially the same, inserted in recesses on the perimeters of the brake wheels, substantially as and for the purpose set forth. I also claim attaching the rope or cable to the car or other weight to be raised or drawn up, by clamping it between two pieces of wood or other material (one or both of which should be fastened to said car or weight), in grooves of the shape in reverse of or formed to fit the strands of the rope, substantially as described."

No. 34,711. H. M. Wyeth, of Pulaski, Iowa, for an "Improvement in pumps."

"I claim the combination and arrangement of the single side valve *e*, with the pump box or chamber A, and discharge pipe F, substantially as and for the purposes set forth."

No. 34,712. James H. Cables, of Plymouth Hollow, Conn., assignor to the American Knife Company, of same place, for an "Improved combination of knife, fork, and spoon."

"I claim the arrangement of the two parts A, B, of the handle, in combination with knife blade C, fork D, and spoon E, and with the hinged catch *g*, elongated pin *d*, spring *h*, and curved slot *m*, all constructed and operating substantially in the manner and for the purpose herein shown and described."

No. 34,713. Elijah C. Dunning, of Bridgeport, Conn., assignor to Irving Hull, of same place, for an "Improvement in metallic cartridge cases."

"I claim a waterproof metallic cartridge case composed of two thicknesses of metal, combined and arranged in the manner and for the purpose substantially as herein set forth and described."

No. 34,714. John Ekin, of Xenia, Ohio, assignor to himself and Wm. and S. M. Allison, of same place, for an "Improvement in furnaces."

"I claim the combination of the supply chamber B, inclined grate D, slag aperture *e*, elose ash pit G, and chimney F, when constructed to operate in the manner and for the purposes herein-before explained."

No. 34,715. Thomas Fisler, of Camden, N.J., assignor to J. P. Reed, of Philadelphia, Pa., for an "Improvement in feed bags."

"I claim the connecting and folding rod attached to the bag or its equivalent, and arranged as herein set forth, and for the purpose specified."

No. 34,716. Charles Gregor, of New York, N.Y., assignor to himself and Charles Schweitzer, of same place, for an "Improvement in machinery for cutting cork into strips."

"I claim, first, the revolving wheel *d*, provided with the cutters *e* and *f*, in the manner specified, and operating as set forth. Second, I claim the arrangement of the feed box, provided with the rollers *i*, *k*, *l*, gears *m*, *n*, *o* and *p*, and pinion *q*, actuated from the wheel *d*, whereby the cork is fed progressively to the action of the cutters, as set forth. Third, I claim the knives *e*, *e*, with the dish formed cutting edges, in combination with the wheel *d*, substantially as set forth, and for the purposes specified."

No. 34,717. Benjamin B. Hawse, of Morrisville, Vt., assignor to Carlos Pierce, of Boston, Mass., for an "Improvement in tents."

"I claim the employment of an expanding and folding frame for distending the upper part of a tent, substantially as described."

No. 34,718. Francis L. Kidder, of Brooklyn, N.Y., assignor to himself and Frederick Hoef, of same place, for an "Improvement in ice cars."

"I claim the platform *a*, provided with the skates or runners, and steered substantially as set forth, in combination with the propelling wheel or wheels (*k*), actuated substantially as specified."

No. 34,719. John Kinniburgh, of Scott's Ironworks, near Motherwell, Scotland, assignor to William Kinniburgh, of Newark, N.J., for an "Improved wash or coating for metallic moulds."

"I claim the employment for the purpose specified, of a metallic mould, when used in connection with the wash composed of pitch or coal tar, barm or yeast, and charcoal or black lead, as herein described."

No. 34,720. Eugene C. Mackinney, of Peekskill, N.Y., assignor to himself and James H. Powell, of same place, for an "Improved device for holding harness reins."

"I claim as an improved artiele of manufacture a rein holder formed of the stationary plate A, and an adjustable plate C, actuated through the medium of the screw B, as herein shown and described."

No. 34,721. Julius J. Muller, of New York, N.Y., assignor to Fredk. Franck, and Jno. A. Tauber, of same place, for an "Improved ore separator and washer."

"I claim, 1st, the arrangement of a series of shaking tables below and in front respectively of each other, and set on inclined slides and actuated in the manner and for the purposes specified. 2nd, I claim the dam slats *d*, *d*, in combination with the shaking tables for the purpose and as set forth. 3rd, and last, I claim the india-rubber buffers *h*, *h*, applied as specified, in combination with the shaking tables in the manner and for the purpose set forth."

No. 34,722. A. Randel, of New York, N.Y., assignor to John J. Eckel, of same place, for an "Improvement in mode of extracting oil, tallow, &c."

"I claim an oil-press, consisting of a bed A, hollow plunger B, I, solid ribbed curb C, *a*, surrounded by bands C^1, shrunk upon its periphery, perforated cylinder D, perforated central discharge tube E, supporting tube E^1, perforated plates F, G, and H, and bars *c*, *e*, *g*, all constructed, combined, and arranged in the manner and for the purposes herein-before explained."

No. 34,723. S. H. Roper, of Roxbury, Mass., assignor to Elmer Townsend, of Boston, Mass., for an "Improvement in hot-air engines."

"I claim as an improvement in hot-air engines in which the working cylinder is separated by a partition or diaphragm from the furnace or fire-box, the arrangement of the valves and their communicating chambers and passages within a valve chest F, on the outside of the shell or casing A, substantially as and for the purpose set forth."

No. 34,724. R. O. Doremus and B. L. Budd, of New York, N.Y., for an "Improvement in treating gunpowder to form cartridges."

"We claim, 1st, forming the ordinary granulated gunpowder of commerce into solid shape suitable for use as cartridges or for other purposes, by compacting the same in dry condition within moulds by pressure so applied as to condense said powder into the shapes substantially as described. 2nd, we claim the cartridge formed of powder in strata of different degrees of combustibility and compacted as described, and for the purposes set forth herein."

No. 34,725. R. O. Doremus and B. L. Budd, of New York, N. Y., for an "Improvement in ball cartridges."

"We claim the herein described method of forming cartridges by uniting the ball directly with the compacted granulated powder as set forth."

No. 34,726. Geo. W. Ayres, of Rahway, N. J., for an "Impro rement in portable ovens."

"I claim the arrangement of the shells of the oven forming the flues and the space for the non-conducting material, the exterior shell having the openings as described for the putting in and taking out of the non-conducting material, in combination with the furnaces and diaphragm as herein recited. I also claim the arrangement of the furnaces, diaphragm, and flues, as set forth."

No. 34,727. Richard Montgomery, of New York, N. Y., for "Improved iron clad vessels."

"I claim, 1st, the angulated recesses in connection with the openings and hollow beams by which the missile can be directed and conveyed across the ship, substantially as described. 2nd, I claim in combination with the recesses the supporting solid beams, placed and operating in the manner as described, and for the purposes herein set forth."

Re-issues.

No. 1288. Thomas J. Mayall, of Roxbury, Mass., assignor to John H. Cheever, of New York, N.Y., for an "Improved composition for the manufacture of emery sticks and wheels."—Patented 17th May, 1859.

"I claim, 1st, the production of a new compound or composition of matter applicable to the manufacture of sticks, wheels, or other tools for grinding, cutting, or polishing metals, glass, or other hard substances, by combining gutta percha and sulphur with powdered emery. 2nd, I claim the production of a new compound or composition of matter applicable to the manufacture of sticks, wheels, or other tools for polishing, grinding, or cutting metals, glass, or other hard substances, by combining gutta purcha and sulphur with powdered emery and olive oil, or its equivalent."

No. 1289. Thomas J. Mayall, of Roxbury, Mass., assignor to John H. Cheever, of New York, N.Y., for an "Improved composition for the manufacture of flexible polishing sticks and wheels."—Patented 17th May, 1859.

"I claim as new articles of manufacture suitable to grinding and polishing metals, glass, &c., sticks and other tools made of a flexible india rubber or gutta percha compound, having emery or other gritty substance incorporated with it. 2nd, I claim as a new composition of matter india rubber or gutta percha combined with sulphur and powdered emery in the proportion and manner herein described, or in such other proportion and manner as will produce a flexible compound by vulcanization."

No. 1290. Thomas Spencer, of Syracuse, N.Y., for an "Improvement in the manufacture of common salt."—Patented 29th May, 1860.

"I claim adding to common salt after it has been drained and in a state of crystallization, the carbonate or bicarbonate of soda, so as to unite the same with the impurities, as and for the purposes set forth."

No. 1291. Thomas Spencer, of Syracuse, N.Y., for an "Improvement in the manufacture of common salt."—Patented 25th September, 1860.

"I claim the admixture of sulphato of soda, or its equivalent, as above set forth, with common salt in a crystallized state, after being removed from the impure bath or 'mother liquor,' for the purposes herein specified."

Designs.

No. 1549. John J. Marcy, of Meriden, Conn., assignor to Edward Miller, of same place, for a "Design for a lantern."

No. 1550. Elemir J. Ney, of Lowell, Mass., assignor to Lowell Manufacturing Co., of same place, for "Six designs for carpet patterns."

List of Patents, with Claims annexed, issued from the United States Patent Office for the week ending 25th March, 1862, each bearing that date.

No. 34,728. Abraham Bare, of Mexico, Ohio, for an "Improved evaporator for saccharine juices."

"I claim, 1st, so constructing pans for evaporating saccharine juices as that in the first stages of evaporation it is done by the agency of fire alone, and in the second stages by steam, first closely confined and very hot, then in apartments less heated, until the desired effect is attained. 2nd, that particular construction of evaporator, wherein the same fire which evaporates in the first stages generates at the same time the steam for the second stages of evaporation. 3rd, the double pan, constructed as described, the first lower section of which contains the generator, the second the steam chamber, and the third and additional sections for gradually decreasing the temperature, for the purposes set forth. 4th, the slide or valve between the steam chamber and the last section below, in combination with the double pan, substantially as and for the purpose described. 5th, the heater or supply pan for water, arranged as described, in combination with the generator, for the purpose set forth. 6th, the first pan, constructed and described in combination with the second pan, when its separate sections are heated by different degrees of heat, for the purpose set forth."

No. 34,729. Henry Berg of Davenport, Iowa, for an "Improvement in breech-loading fire-arms."

"I claim, 1st, the crank lever F, f, and eccentrically flanged bolt, E, e, e^1, constructed as described, and employed in connection with the hinged barrel, D, d, d^1, and vertically slotted breech B, in the manner and for the purposes explained 2nd, the yielding lever I, i, i^1, constructed and employed in the manner explained to raise the hammer by the depression of the barrel. 3rd, the catch K, k, employed in the described connection with the sliding lever I, to disconnect the self-cocking apparatus. 4th, the sliding plate o, employed in the manner shown and explained to cover the priming passage M, or permit the withdrawal of the priming when desired."

No. 34,730. Richard C. Bristol, of Chicago, Ill., for an "Improvement in breech-loading ordnance."

"I claim, 1st, supporting the trunnions of a revolving breech, upon movable blocks, acted upon by springs in the manner described, for the purpose of freeing the breech from contact with the main barrel, when the pressure which forces the breech against the main barrel is removed. 2nd, I claim so constructing and hanging the turning breech on trunnions and against a yielding force, that when the breech is released it will automatically move out of contact with the main body of the cannon, and also automatically turn its bore to the vertical position, substantially as and for the purposes set forth. 3rd, I claim the yoke E, in combination with the ears F, and wedges m, and t, in the manner and for the purpose substantially as set forth. 4th, I claim the combination of a revolving breech with the cams i, springs k, and wedges l, and m, substantially as described. 5th, I claim the rest b, in combination with the revolving breech B, for not only arresting the excessive automatic revolution of the breech but for supporting it in a horizontal position, substantially as described."

No. 34,731. Albert Brown, of Troy, N. Y., for an "Improvemeni in stove grates."

"I claim the arrangement of the transverse barred grates D, and studs m, with the slotted pivoted levers B, B^1, as herein shown and described; the arrangement of the recesses e, upon the sides d, as and for the purpose herein shown and described.

No. 34,732. Franklin E. Brown, of Hightstown, N. J., for an "Improvement in cultivators."

"I claim the combination of the adjustable slides F, plates G, slotted pendants E, and connecting rod H, with each other, and with the standard I, in the manner herein shown and described. The arrangement of the pendant slotted bars E, J, slides F, K, plates G, L, rods H, M standards I, N, and arms i, o, with each other and with the arms q, links j, arms s, shafts l, and lever o, as and for the purpose herein shown and described."

No. 34,733. Harvey Brown, of New York, N.Y., for an "Improvement in chimneys for lamps."

"I claim the arrangement and construction of a lamp chimney, having a glass bulb for its base, with a sheet

metal tube attached above, substantially in the manner and for the purposes set forth. Second, I claim the shade for this lamp chimney, constructed and arranged substantially in the manner and for the purposes set forth."

No. 34,734. C. E. Brownell, of East Haddam, Conn., for an "Improvement in cylinders for machine cards."

"I claim providing the cylindor with a movable head B, or otherwise making a portion of the same to which one end of the card fillet is attached, movable about its axis relatively to the other portion thereof, to which the other end of the fillet is attached, substantially as and for the purposo herein specified."

No. 34,735. E. P. Brownell, of East Haddam, Conn., for an "Improvement in crank motion."

"I claim the combination of an obliquely sliding wrist pin, a spring and a stop, the whole applied in combination with the crank shaft and pitman to operate substantially as and for the purpose herein specified."

No. 34,736. E. and A. Buckman, of East Greenbush, N.Y., for an "Improved knife, fork, and spoon cleaning machine."

"I claim a knife, fork, and spoon cleaner, composed of the spring planes E, E, cylinders H, H¹, ledge G, arranged as set forth, and otherwise made, as herein shown and described."

No. 34,737. O. R. Burnham, of New York, N.Y., for an "Improvement in hoop skirts."

"I claim, 1st, the construction of skirt hoops of strips of steel or other metal, arranged edge to edge, and woven or braided together with fibrous material, so that each hoop shall be composed of two or more strips, substantially as herein specified. 2nd, the combination in a skirt of tapes or straps C, C, woven double at the places where the hoops are connected, and single between those parts, hoops which are composed each of two or more strips of steel united by weaving or braiding, as described, and are inserted through the double portions of the straps, metallic clasps passing through both the tapes or straps and the hoops, all as herein specified."

No. 34,738. James Cunfield, of Sabula, Iowa, for an "Improved gold washer."

"I claim the gold washer constructed and operating in the manner and for the purposes substantially as delineated and set forth."

No. 34,739. Frank Chase, of South Sutton, N.H., for an "Improvement in blind and shutter fastenings."

"I claim the curved rod or bar D, applied to the blind or shutter C, as shown, provided with the lateral projection *b* and eye *f*, and used in connection with te A, and pin *e*, attached to the window frame A, substantially as and for the purpose set forth."

No. 34,740. Robert J. Colvin, of Lancaster, Pa., for an "Improvement in combined sword and pistol."

"I claim the arrangement and combination of a sword with a revolving pistol, when the said revolving pistol is arranged or attached to the back of the blade of the sword, in advance of the handle, by flanges or otherwise, as herein described."

No. 34,741. John D. Crocker, of Norwich, Conn., for a "Machine for cutting corks for stoppers."

"I claim, 1st, the tilting arms G, G, one or more provided with the spindles *r**, and arranged in relation with the rotating cutter E, in connection with the rotary arbors H, one or more also placed on the arms G, G, and provided with the spindles I, as and for the purpose set forth. 2nd, operating or sliding the spindles I, so that they may grasp and release the corks at the proper time by means of the bands or rings J, J, slide M, spring N, lever O, and the shoulder *j* attached to the bar *k*, as herein set forth. 3rd, rotating the arbors H, H, through the medium of the adjustable wheels U, U, on the shaft S, S, and the pinions *d*, *d*, on the arbors H, H, arranged as shown, so that the arbors H, H, may be rotated as described. 4th, the levers W, when used in combination, and arranged in relation with the arms G, G, as shown to operate as feeders as set forth."

No. 34,742. J. D. Custer, of Norristown, Pa., for an "Improved lamp burner."

"I claim, 1st, the bevel lamp wick tube B, and the mode of folding up the wide wick or wicks below the wick shaft C, substantially as described and shown. Second, the shade tube D, and its spring E, one or both to be used on my burner or not as desired, substantially as described. Third, the regulating cap F, to be used on my said burner, or not, as desired, substantially as described and shown."

No. 34,743. Wm. Wentworth Davis, of Portland, Maine, for an "Improvement in stove-pipe thimbles."

"I claim, 1st, the cubical box B, when constructed as represented in the drawings, with four of the sides only perforated with holes of various sizes and forms, the fifth whole, and sixth removed, or whether all of its sides are so perforated, as and for the purposes specified. 2nd, in combination with the above the case or safe guard A, constructed as described, as and for the purposes set forth."

No. 34,744. R. Ogden Doremus and Bern L. Budd, of New York, N.Y., for an "Improvement in waterproofing cartridges."

"We claim the waterproofing of compacted cartridges made by compressing dry granulated powder as set forth."

No. 34,745. Otto Ernst, of New York, N.Y., for an "Improvement in tobacco pipes."

"I claim the combination of the inner tube *c*, and follower *d*, with the spiral spring *e*, when constructed to operate in the manner and for the purposes substantially as described."

No. 34,746. Adam and William Fischer, of New York, N.Y., for an "Improved imitation marble."

"We claim the combination of matter substantially as herein described, for the purpose of making artificial marble, in the manner and for the purpose substantially as described."

No. 34,747. James R. Finch and Thos. W. Henderson, of Dayton, Ohio, for an "Improvement in seeding machines."

"We claim, 1st, the emyloyment of the wheels D, D, provided upon their peripheries with the zig-zag or cam flange represented, and with the lugs *a*, *a*, arranged and used upon the wheel and the flange, as is herein fully set forth, for the purpose specified. 2nd, pivoting the boot H to the drag bar G, through the ear at the upper front end of the said boot, by means of the rod J, which carries the roller I, behind the boot, substantially as and for the purpose set forth."

No. 34,748. A. C. F. Derocquigny D. Gance and Louis Hanzo, of New York, N.Y., for an "Improvement in sewing machines."

"We claim, 1st, the combination with the swinging tube F, and box H, or other equivalent swinging guides for the needle bar of a grooved plate K, a lever I.¹, two switches L, L, and a pin *i*, the whole applied and operating substantially as herein described. Second, the combination with a laterally moving needle and a shuttle of a hook *p*, applied to operate substantially as herein described with reference to figures 8 and 9. Third, the feed mechanism composed of the grooved dog T, supporting point 21, arm T¹, and curved bar U¹, the said bar deriving a reciprocating motion perpendicular to the bed of the machine, and the said arm being adjustable along the curved bar, substantially as and for the purpose herein specified. Fourth, the within described mechanism for lifting the presser. Fifth, operating the shuttle by means of two reciprocating holders Z, Z¹, which deliver it from one to the other, and in so doing pass it through the loops of the needle thread, substantially as herein described, without the use of any fixed guide in contact with the shuttle."

No. 34,749. D. R. Fraser, of Chicago, Illinois, for an "Improvement in packing for pistons."

"I claim, 1st, adjusting within a piston, cut and uncut rings, so that both shall be free to move independently of the follower and piston head, substantially as described. 2nd, the combination of the channels *f*, and the passages *r*, substantially as and for the purpose described. 3rd, the use of the uncut rings, with face channels *f*, for holding the cut packing ring steam tight, substantially as described. 4th, the combination of the uncut rings and the spring wedge, so

that by the force of steam and the action of the wedge the cut ring shall be held both steam tight and distended, substantially as and for the purpose described. 5th, the combination of the piston head valves, shouldered uncut rings and the cut ring, for the purpose set forth. 6th, the combination of the two springs, screw and wedge, substantially as and for the purpose described."

No. 34,750. DANL. S. GARDNER and N. A. MANNING, of Greene, N.Y., for an "Improvement in presses for compressing and baling."

"We claim the suspended nut and toothed wheel D, and pinion E, placed respectively on the screw C of the follower or plunger B, and crank shaft F, and arranged to gear into each other, in combination with the fixed ratchet H, on shaft F, and loose lever I, provided with the pawl J, all being arranged to operate as and for the purpose herein set forth."

No. 34,751. EDWIN GORDON, of Taunton, Massachusetts, for an "Improvement in rotary diggers."

"I claim the combination of the draught bar O, and adjusting lever *e* with the bar *g*, upright *f*, arm *b*, and side cases *a*, as and for the purpose herein shown and described. The arrangement of the cylinders A, E, with each other, and with the gears *h*, *i*, *k*, *l*, as herein shown and described."

No. 34,752. JOHN J. HERRICK, of Milwaukie, Wisconsin, for an "Improvement in stoves."

"I claim the flues *f*, *f*, removable pan P, heating space D, when combined with a heating stove, constructed and arranged to operate as described."

No. 34,753. JAMES HIGGINS and THOMAS SCHOFIELD WHITWORTH, of Salford, England, for an "Improvement in throstles for spinning cotton."

"We claim as our invention and as applied to machines, in which a fixed tube is traversed to the copping rail, causing the part which so traverses to be capable of swivelling, also in reference to machines in which a tube passes into the bobbin after the manner illustrated at Fig. 3, we claim so connecting the said tube to the copping rail, that it shall be capable of swivelling."

No. 34,754. JEDEDIAH HOLCOMB, of Brandon, Vermont, for an "Improvement in steelyards."

"I claim the use of the open head A, substantially as set forth, in combination with the beam of a steelyard, for the purposes herein-before described."

No. 34,755. JARED HOLT, of Albany, New York, for an "Improved device for drawing in trunk stays."

"I claim the arrangement of the springs D, or their equivalent, in combination with the trunk stays C, substantially in the manner and for the purpose shown and described."

No. 34,756. C. H. B. KELLOGG, of Arcadia, Ohio, for an "Improved washing machine."

"I claim the arrangement described of the springs 10, 10, in combination with the rods 14, 14, bearing blocks 9, 9, hollow side pieces 6, 6, and the receptacle in which the clothes are to be washed, substantially as and for the purposes set forth."

No. 34,757. HENRY LOEWENBERG, of Boston, Mass., for an "Improved composition for manufacture of mouldings and other purposes."

"I claim a composition made by combining starch and sawdust or comminuted wood by steam, and by stirring them while under the influence of steam, so as to reduce them to a paste or dough capable of being moulded and dried, and becoming flexible when dry. And I also claim the combination of potash or an alkaline equivalent with the composition of starch and sawdust while being treated as described, the same being for the purpose as above specified."

No. 34,758. ALFRED E. LYMAN, of Williamsburg, Mass., for an "Improvement in candlesticks."

"I claim the candlestick as herein described as a new article of manufacture, substantially as specified."

No. 34,759. JOHN D. LYNDE, of Philadelphia, Penn., for an "Improved bottle stopper."

"I claim the arrangement of the rubber packing D, which gives it a tapering shape when not in use, and causing it to make the joint as described when pressed into the bottle. The channels B, B, in the top of the stopper, for the purpose set forth. The device Fig. 6 to attach the stopper to the neck of the bottle, the whole constructed and operated substantially as and for the purposes set forth."

No. 34,760. JOHN P. MANNY, of Rockford, Illinois, for an "Improvement in harvesters."

"I claim, first, the triangular platform E, when constructed and arranged substantially in the manner described for the purpose set forth. Second, the combination of the triangular platform E, with the finger beam D, and raker's stand or seat L, when the whole are arranged in relation to the driving wheel, and substantially in the manner and for the purpose described. Third, the combination of the platform E, foot board M, and raker's seat L, as and for the purposes described."

No. 34,761. JOHN P. MANNY, of Rockford, Illinois, for an "Improvement in harvesters."

"I claim, first, the combination of the converging gear frame B, with the hinged diverging hounds *c*, and rigid tongue C, when arranged and operating substantially in the manner and for the purposes described. Second, the combination and connection of the gearing frame and finger beam with the horizontal frame J, by means of both a flexible and a rigid connection, substantially as described for the purpose of keeping the finger beam horizontal in every position, as set forth. Third, locking the caster wheel K, for the purpose of preventing lateral motion of the machine when working on hill sides, substantially in the manner described."

No. 34,762. JOHN P. MANNY, of Rockford, Illinois, for an "Improvement in harvesters."

"I claim the combination of the driving wheel A, and gear wheel S, with the shield or guard plate S^1, constructed and arranged as and for the purposes described. Second, the combination of the countershaft *t*, with the sliding plate s^1, constructed, arranged, and operating as described, for the purpose of throwing the mechanism into or out of gear."

No. 34,763. JOHN P. MANNY, of Rockford, Illinois, for an "Improvement in mowing machines."

"I claim, first, mounting the apparatus which regulates the height of the finger beam on an extension of one of the hounds of the tongue, as and for the purpose described. Second, the combination in a mowing machine of a finger beam, gearing frame, hinged tongue, and driver's seat, when the whole are arranged and operated substantially in the manner herein described."

No. 34,764. MARTIN H. MANSFIELD, of Ashland, Ohio, for an "Improvement in clover machine."

"I claim the reversible cylinder C, in combination with the self adjustable box D, primary and secondary hoppers M, N, with revolving feeder *o*, as and for the purpose set forth."

No. 34,765. A. MCGUFFIE, of Rochester, N. Y., for an "Improvement in truss bridges."

"I claim the combination of the arch sections A, A, (either with or without the interposed heads or blocks B, B,) the posts C, C, the joint blocks E, the links D, D, diagonal tension rods *a*, *a*, top chords F, F, and lateral braces *c*. *c*, the whole arranged substantially as herein specified."

No. 34,766. FREDERIC H. MOORE, of Boston, Mass., for an "Improvement in apparatus for cutting garments."

"I claim in machines for cutting out garments, hanging the blade *f* to a reciprocating frame, so that the position or inclination of the blade with respect to the plane of the table A may be varied as required, substantially as specified. 2nd, I claim bending forward or projecting a portion of the cutting edge of the blade *f*, and extending the cutting edge below the bend substantially as shown in fig. 1, for the purpose specified.

No. 34,767. LEWIS F. NOE, of New York, N.Y., for an "Improved paddle wheel."

"I claim the combination of the middle arms 2, 2, forked or raised as described to receive the buckets from each side with the straight arms 3, 3, the bent arms 1, 1, and the straight or flat buckets 4, 4, substantially as described, and accomplishing the purpose set forth."

No. 34,768. Nelson W. Northrup, of Greene, N.Y., for an "Improvement in hot-air stoves."

"I claim E the combination with the combustion chamber B of the double fire boxes, the revolving or swing grates, the air heating chambers and flues, and the air passages E, the governing dampers *m*, I, I, *k*, *k*, the whole being constructed and operated substantially as above described."

No. 34,769. Nelson W. Northrup, of Greene, N.Y., for an "Improvement in coupling, shafting, and rods."

"I claim the coupling made in two halves as described, with the grooves, ribs, or flanges and band or sleeve and set screw combined, and for the purposes set forth."

No. 34,770. Milton J. Palmer, of Homer, N.Y., for an "Improvement in churn dashers."

"I claim a horizontal churn dasher, with the slats or floats inclining in opposite directions upon opposite sides of the shaft, in combination with bars parallel with the shaft, with the horizontal U-shaped grooves closed at the ends, and so forming an air chamber as they pass into the cream."

No. 34,771. C. O. Parmenter, of Amherst, Mass., for an "Improvement in machines for forming bonnets."

"I claim the combination of the stretcher H with the clamps D, E, and former J, the said parts being constructed and operating together, as herein shown and described. The combination of the movable suspension spindle L, and adjusting wheel I, with the stretcher H, substantially as herein shown and described."

No. 34,772. C. W. Pinkham, of Fond du Lac, Wisconsin, for an "Improved burning fluid."

"I claim the fluid for illuminating purposes composed of the ingredients substantially in the manner and proportions herein-before described and set forth."

No. 34,773. A. P. Pitkin, of Hartford, Conn., for an "Improvement in apparatus for the manufacture of illuminating gas."

"I claim, first, making the front or back plate (one or both) with one or more collars *c*, cast or put on to them, cylindrical shape or otherwise, and sufficiently large to admit of the retorts being removed when bulged or expanded from use, substantially as described. Second, I claim making the retorts *d*, with one or more flanges or rings *e*, cast or put on to them, cylindrical shape or otherwise, and sufficiently large to fill the collars on the plate a^1. Third, I claim forming an expansion joint for retorts by means of a liquid joint on the condenser or cooler, substantially as shown and described."

No. 34,774. Henry Port, of New York, N.Y., for an "Improvement in metallic moulds for casting pumps."

"I claim in the manufacture of double acting pumps, the employment of a metallic mould composed of the plates or sections *z* and *i*, cores *a* and *b*, and the core or outer shell of the mould *d*, constructed and arranged substantially as described. I also claim the slide *m* for the purpose set forth, when used in combination with a metallic mould for casting pumps."

No. 34,775. John W. Ricker, of Boston, Mass., for an "Improvement in corn shellers."

"I claim the combination and arrangement of the presser plate with the pistons, slotted guide tubes, follower, and weights, all acting together substantially as set forth. Also the formation of the surface of the shelling wheel in alternate depressions and elevations, both studded with teeth, as shown and described."

No. 34,776. Louis C. Rodier, of Springfield, Mass., for an "Improvement in magazine fire-arm."

"I claim, 1st, a fire arm in which the breech chamber is divided longitudinally throughout a portion of its length, at or near the centre of the bore, and the two parts hinged together at a point forward of the said division in the chamber, when the two parts are so proportioned to each other, and to the cartridge used, that the cartridge shell shall extend forward of the forward end of this said division or joint a sufficient distance to allow the shell to serve as a packing to the joint, the whole being arranged substantially for the purpose herein specified. 2nd, the movable breech piece E, when used in combination with a breech chamber, constructed as above described, for the purpose of allowing the shell to be removed by the piece C, in the manner substantially as herein set forth. 3rd, the ring or ferrule E, in combination with the breech piece E, for confining it in its place when operating substantially, as herein described. 4th, the combination of the movable wedge shaped breech piece with the magazine G, having a spring for forcing out the cartridges contained therein when said magazine is situated with relation to the bore of the breech chamber in such manner that the forward end of the magazine is a continuation of the bore of the chamber, so that the force of the spring in the magazine throws the cartridge directly into the bore of the chamber without the intervention of other device."

No. 34,777. Edward A. G. Roulstone, of Roxbury, Mass., for an "Improvement in passing boxes."

"I claim making a passing or other similar box of the three separate layers of material, as described, and bringing the side edges together, so as to unite them by one seam, as above set forth. I also claim constructing the cover C with the piece composed of a block of wood *n*, or its equivalent, covered by leather *q*, and its upper covering *p*, they being connected to the top, as above described."

No. 34,778. John Rush, of Philadelphia, Pa., for an "Improvement in knapsack."

"I claim the combination of the arms G, G, and sheeting K, either with or without the arms M, M, for the purpose of forming a bed of the knapsack, as described."

No. 34,779. Gelston Sanford and James E. Mallory, of New York, N.Y., for an "Improvement in machinery for breaking flax and hemp."

"We claim the combination of the series of feeding cords or the equivalent thereof, a grooved surface or the equivalent thereof, and beaters, substantially as and for the purpose described."

No. 34,780. Joel B. Sackett, of Lawton, Michigan, for an "Improvement in machines for dressing millstones."

"I claim, 1st, the picks (*a*, *a*), clamps (a^1, a^1), nuts (*c*, *c*), and (*d*, *d*), and pick handles (*b*, *b*), when all shall be constructed and arranged substantially as and for the purpose set forth. 2nd, the employment of the sliding cylinder (C), when provided with pins (*i*, *i*, *i*), in combination with cog wheel (D), substantially as described. 3rd, I claim the cylinder (E^1), when supported in the adjustable bearing described in combination with thumb screws (*r*, *r*), for the purpose set forth."

No. 34,781. Gelston Sanford and James E. Mallory, of New York, N.Y., for an "Improvement in machines for scutching flax and hemp."

"We claim arranging two series of scutching bars on two sets of hubs and arms, or on two sets of heads or wheels, as the equivalent thereof, the two series being geared to rotate in opposite directions and with equal velocity, and set so near that the bars constituting each series shall, in the rotation, pass in the spaces between the bars constituting the other series, and near to the axis of rotation, as herein described, and for the purpose set forth."

No. 34,782. James Sangster, of Buffalo, N.Y., for an "Improvement in lamps."

"I claim the within described lamp burners constructed as represented, to wit, with the cone K, corrugated around its upper aperture, and terminating in points at its lower extremity, the flange A, and the wick tube B, provided with gutters at its top, and having its edges bent together, as described, the several parts being constructed and arranged together for forming a lamp burner, as is fully set forth."

No. 34,783. Charles B. Sawyer of Fitchburg, Mass., for an "Improvement in hot-air registers."

"I claim combining a water chamber with a hot-air register in such a manner that the hot-air pipe shall pass through the water chamber, substantially as set forth."

No. 34,784. A. G. Searls, of Cleveland, Ohio, for an "Improvement in churns."

"I claim the attachment of the beaters C, C, to a revolving disk or cover B, in combination with a square casing A, as and for the purpose described."

No. 34,785. William H. Seyeour, of West Hartford, Conn., for an "Improvement in heaters."

"I claim, 1st, the combination of the water belt D, Fig. 1, and its connecting points F, with the air space C, extending from the fire pot A to the said water belt, substantially as represented, and for the uses set forth. 2nd, I claim the combination of the flange radiators E, Fig. 1, projecting from the water belt D into the air space C, with the flange radiators B, projecting from the fire pot A, substantially as and for the uses and purposes represented. 3rd, I claim the peculiar construction and arrangement of the upper section of the device represented in Figs. VII. and X., including its pipes J. K, and N, and its caps L and M, substantially as and for the purposes specified."

No. 34,786. Stephen B. Skiff, of New Bedford, Mass., for an "Improved vice for holding and swaging horse-shoes."

"I claim a hinge vise A^1, B^1, with movable and adjustable dies G^1, G^1, affixed to the jaws J^1, J^1, on which to form the calks of shoes, the treadle D^1, and friction wheel E^1, constructed and operating substantially as and for the purpose set forth and described."

No. 34,787. Joseph Slocum, of Syracuse, N.Y., for an "Improvement in potato diggers."

"I claim the combination of the standard C with the undulating or double concave removable share H, and rods, arranged and operating in connection with the adjustable plates F, bars E, and bar D^1, as and for the purposes herein shown and described."

No. 34,788. Charles W. Smith and Thos. D. Stetson, of New York, N.Y., for an "Improvement in the plungers of concussion shells."

"We claim the use of soft material, such as lead or its equivalent, in the percussive mechanism of shells, substantially in the manner, and so as to produce the effect herein set forth."

No. 34,789. Carlos Stebbins, of Pike, N.Y., for an "Improvement in sewing machines."

"I claim, 1st, obtaining the movement of the needle of a sewing machine from a crank or its equivalent through the agency of a pitman and toggle joint *e*, applied and arranged in combination with the said crank or equivalent, to operate substantially as herein specified. 2nd, transmitting motion from the crank A, or its equivalent, to the vibrating feed bar K^1, by means of a system of levers C, G, H, M, O, and connections and slide X, arranged, applied, and operating substantially as herein set forth."

No. 34,790. James H. Stevens, of East Durham, N.Y., for an "Improvement in machines for spreading manure."

"I claim, 1st, the arrangement of the endless flexible bed C, windlass shaft J, and its connections, in combination with the buckets D, spring *f*, and conducting tubes G, H, I, the whole combined and operating in the manner and for the purpose described. 2nd, the arrangement of the endless flexible bed C, rollers B, B, sides A, conducting tubes G, H, I, and framing F, the whole supported upon wheels and operating in the manner and for the purpose described."

No. 34,791. C. A. Stevens and J. V. Rockwell, of New York, N.Y., for an "Improvement in portable stoves."

"We claim the combination of the top plate A, furnished with holes, and having covers attached to the plate, as shown, with the side plates C, C, back plate B, and doors D, D, the whole constructed and hinged together to make a folding stove, substantially as set forth."

No. 34,792. M. L. and O. A. Stray, of Willoughby, Ohio, for an "Improvement in fruit baskets."

"We claim the combination of the perforated cover and basket, when the same are constructed and secured together as and for the purposes specified."

No. 34,793. F. G. L. Struve, of Jefferson, Wis., for an "Improvement in feed racks."

"I claim the arrangement of the notched arms D, D^1, or their equivalents, in combination with the movable rack or racks A, A^1, constructed and operating substantially in the manner and for the purpose herein shown and described."

No. 34,794. David Tanguary, of Carmi, Ill., for an "Improvement in stump extractors."

"I claim the application, combination, and arrangement of the sweep G, the hook E, the spring F, the nut as seen in Figure 3, and the rod I, constructed as described, and operating as and for the purposes, substantially as set forth."

No. 34,795. L. H. Thomas, M.D., of Waterbury, Vt., for an "Improved clothes wringer."

"I claim the shape and construction of the self-adjusting block K and spring N, combined as herein described as and for the purpose specified."

No. 34,796. George W. Walker, of Boston, Mass for an "Improvement in stoves."

"I claim a stove made or furnished with a discharging spout or conduit, or its equivalent, and a rake receiving passage leading from its ash chamber substantially as described, whereby ashes may be raked or discharged from the said ash chamber into a covered pail constructed with an ash receiving hole or induction pipe, to communicate with the ash chamber through the discharging opening or spout thereof, as explained."

No. 34,797. Maximilian Wappich, of Sacramento, Cal., for an "Improved apparatus for shipping spare rudders."

"I claim providing the sterns of vessels and their rudders with reserve braces, pintles, and steps, substantially in the manner and for the purpose set forth. I claim a rudder having a metal bearing E, in combination with a cross bar L, springs M and M^1, enclosing boxes K, substantially in the manner and for the purpose specified. I claim the rudder yoke O, having lips V, in combination with the vertical pins T and cylinders U, the whole arranged and operating substantially in the manner and for the purposes set forth For shipping and unshipping vessel rudders, I claim the application of a shipping tong W, substantially in the manner and for the purpose described."

No. 34,798. M. S. Wickersham, of Philadelphia, Pa., for an "Improvement in explosive shells for ordnance."

"I claim the construction or manufacture of explosive shells with their interior surfaces grooved, furrowed, corrugated or otherwise indented substantially as and for the purpose herein specified."

No. 34,799. Abel Wilson, of Frankford, Pa., for an "Improvement in soldering irons."

"I claim the tapering jaws B and B^1 adapted to receive the tapering shank *d*, of the copper bar, and secured to or forming a part of the stem A in combination with the tapering ferrule G and the nut H, or its equivalent, the whole being constructed and arranged substantially as and for the purpose herein set forth."

No. 34,800. Allen B. Wilson, of Waterbury, Conn., for an "Improvement in photographic camera."

"I claim, 1st, a negative plate and bath holder having a hollow journal channel and throat constructed and operating substantially as and for the purposes described. 2nd, The hollow journal described for introducing and withdrawing the baths. 3rd, the combination of negative plate and bath holder, having a hollow journal channel and throat as one instrument, with the crooked stem funnel, constructed and operating substantially as described. 4th, giving the combined negative plate and bath holder the capacity of assuming horizontal and perpendicular positions at will, in the manner and for the purposes described. 5th, the combination of camera box, crooked stem funnel, hollow journal, channel and throat, and fluid tight holder, substantially as described."

No. 34,801. Edward F. Woodward, of Brooklyn, N.Y., for an "Improvement in coffee boilers."

"I claim causing a circulation by means of a tubular or channel formed bottom as herein set forth. I also claim forming the tubular bottom by means of one or two corrugated plates as specified. I also claim in combination with the circulating apparatus the receiver herein specified. I also claim the cone *c*, or it sequivalent, for conveying heat to the upper reservoir *d*, as described.

No. 34,802. William Boyers, of Mount Carroll, Ill., assignor to John L. Livingston, and John B. Shaffer, of same place, for an "Improved rotating clothes dryer."

"I claim the combination of the spiral grooved, bell shaped flanged pulleys, attached by braced projections to a building, or placed upon three or more posts in connection with the endless cord all arranged substantially as, and for the purpose specified."

No. 34,803. C. R. Alsop, of Middleton, Conn., assignor to J. W. Alsop, of New York, N. Y., for an "Improvement in revolving fire-arms."

"I claim the arrangement of a wedge H, with rear of the recoil shaft F, and stationary abutment or bearing G, substantially as herein shown and described for the purposes set forth."

No. 34,804. Solomon T. Holly, of Rockford, Ill., assignor to Mary Manny, of same place, for an "Improvement in Harvesters."

"I claim the combination of a caster wheel with a tongue in advance of it, and with the part of the machine that is behind it, by means of a compound spindle-box fitted with lateral trunnions and with fastenings for the tongue, the combination as a whole being substantially as described. I also claim the combination of the cutter-frame of a harvester, the hinged part of the machine which precedes it, a thrust bar jointed to one portion of the machine, and an elevated driver's seat and standard secured to the other portion of the machine in such manner that the driver can exert the muscular force of both his leg and arm in elevating the finger beam, substantially as set forth. I also claim the combination of the thrust bar with a rack and spring catch the former being secured to the thrust bar, and the latter being connected with the standard to which the attendant's hand is applied when the finger beam is to be raised or lowered, substantially or set forth. I also claim combining the driver's seat with the frame of the machine by means of the frame of rake mechanism, so that this last frame performs two functions, substantially as described. I also claim the combination of the main gathering arm of a rake with a crank that moves in a horizontal plane or thereabouts, and with a rake crane having a cam plate that is horizontal or thereabouts, the combination as a whole being and operating substantially as described. I also claim the combination of the projecting end of the secondary gathering arm of the rake, with an arm of the crane that is at the same side of the crane axis, by means of a radius bar pivoted to the cam arm between the axis thereof and the main gathering arm of the rake, substantially as herein described. I also claim the combination of the palm with part of the rake mechanism that supports it by means of a joint located at or near the lower edge of the palm, and a spring that causes the palm to turn upon this lower joint, substantially as described. I also claim the combination of an intermediate cog-wheel shaft of the rake mechanism with an oscillating box operated by a lever, substantially as described."

No. 34,805. Wm. H. Mathews, of Chelsea, assignor to Williams and Co., of Boston, Mass., for an "Improved lamp-shade holder."

"I claim the improved shade holder as made, with a contractile ring, and with its springs provided with jaws *i*, so as to operate with such ring and against the paper shade, substansially as described. I also claim the arrangement and combination of the inner ring with the springs made with the jaws as described, whereby the said springs and inner ring may be employed to hold the lamp-shade to the outer or main ring."

No. 34,806. Bern L. Budd, of New York, N.Y., for an "Improvement in shot cartridges."

"I claim the method of forming fixed charges of shot, so as to be capable of being used without wrappers or cases of any kind, by pouring among the shot while in a mould some easily fusible material, as grease, stearine, &c., which on cooling will fix the shot, and when discharged from the mould will retain said shot in the order and form they took in the mould, in the manner and for the purpose described herein. I also claim, in combination with the above, the method of connecting the cut wads to the two ends of the charge by a leaden wire, or rod of other equivalent material, passing into or through the mass of shot, as described herein."

Re-issues.

No. 1292. Charles T. Eames, of Milford, Mass., for an "Improvement in boot-trees."—Patented 27th May, 1856.

"I claim a boot-tree distended by means of a single cam or wedge attached to a stretching rod D at its lower end, and traversing upon an inclined plane located in the back A, at or near its lower end, the same operating substantially in the manner as above set forth.

No. 1293. Augustus P. Griffing, of East Cambridge, Mass., for an "Improved inkstand."—Patented 4th February, 1862.

"I claim the inkstand, the caps *b*, *f*, of which are made to operate substantially in the manner specified."

No. 1294. Daniel B. Neal and George E. House, of Mount Gilead, Ohio, Assignees of D. B. Neal, H. C. Emery, and George E. House, of same place, for an "Improvement in apparatus for evaporating saccharine juices."—Patented 21st February, 1860.

"We claim, 1st, leading a current of cold air under the bottom of the sugar pan for the purpose of facilitating the removal of the scum, substantially in the manner described. 2nd, cooling that portion of the pan from which the molasses is about to be withdrawn, without interrupting the boiling of the crude juice in the other portions of the pan, substantially in the manner described."

No. 1295. Coed. S. Buchanan, of New York, N. Y., assignee of Jean Theodore Coupier and M. A. C. Mellier, of Paris, France, for "Improvements in the preparation of paper stuff."—Patented 2nd August, 1853.—Ante-dated 7th May, 1851.

"We claim, 1st, treating straw with pure caustic alkali (previously freed from lime), for loosening the color, preparatory to the bleaching process, substantially in the manner and for the purpose set forth. 2nd, the circulation of the caustic fluid through the stock, so as to avail ourselves of repeated chemical action on the fibrous material, substantially in the manner and for the purpose set forth. 3rd, in combination with the alkaline treatment of straw as herein described, we claim the use of the hypo-chlorites as described and for the purpose set forth."

No. 1296. Moses Marshall, Lowell, Mass., assignor to S. S. Bucklin, of Brookline, Mass., for an "Improvement in pegging machines."—Patented 5th November, 1861.

"I claim a feeding point, so arranged and operated as to enter the hole previously made by the awl, and move the machine along for the purpose set forth."

Designs.

No. 1556. Elemir J. Ney, of Lowell, Mass., assignor to The Lower Manufacturing Company, of same place, for a "Design for a carpet pattern."

No. 1557. William W. Stevens, of Portland, Maine, assignor to Nathaniel P. Richardson and Co., of same place, for a "Design for a cooking stove."

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——— Portsmouth ditto.
——— Devonport ditto.
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B. WOODCROFT.

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Applications for Letters Patent.

(11*th*, 12*th*, *and* 14*th April*, 1862.)

1039. Henry Holland, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in manufacturing the stretcher joints of umbrellas and parasols."—Dated 11th April, 1862.

1040. James Thomas Grice, of Birmingham, in the county of Warwick, Tube Maker, for an invention of "Improvements in the manufacture of twisted metallic tubes." — Dated 11th April, 1862.

1041. Edward Hamer Carbutt, of Bradford, in the county of York, Engineer, for an invention of "Improvements in pistons."—Dated 11th April, 1862.

1042. John Garnett, of Windermere, in the county of Westmoreland, Printer and Stationer, for an invention of "Improvements in apparatus for washing photographic pictures." — Dated 11th April, 1862.

1043. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for an invention of "An improved lamp for lighting mines."—A communication to him from abroad by Alphonse Dumas, of No. 15, Passage des Petites Ecuries, Paris, France, Engineer superintending the Mines of Luc. — Dated 11th April, 1862.

1044. Jules François Mathias, of 22, Rue de Chalons, Paris, in the empire of France, Hat Manufacturer, for an invention of "An apparatus for pressing and ironing straw hats of any shape or form."—Dated 11th April, 1862.

1045. François Rigollot, of No. 15, Passage des Petites Ecuries, Paris, in the empire of France, for an invention of "Improvements in machinery or apparatus for manufacturing riveting pegs for boots and shoes, and other pins or pegs." — Dated 11th April, 1862.

1046. Jean Marie Landmann, Incumbent of the parish of Ste. Croix, in the town of Algiers and colony of Algeria, for an invention of "Improvements in hydraulic engines."—Dated 11th April, 1862.

1047. Thomas Knowles, James Houghton, William Knowles and William Houghton, of Gomersal, in the county of York, Machine Makers, for an invention of "Improvements in looms for weaving."—Dated 11th April, 1862.

1048. Ellis Butterworth, of Calder Cottage, near Rochdale, in the county of Lancaster, Consulting Engineer and Patent Agent, for an invention of "Improvements in machinery for applying adhesive substances to preserve the form of cops of yarn."—Dated 11th April, 1862.

1049. Wlliam Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the manufacture of leathern accoutrements."—A communication to him from abroad by Messrs. Adolphe Blanc and Jean Frédéric Auguste Marty, both of 29, Boulevart St. Martin, Paris.—Dated 11th April, 1862.

1050. William Bush, of Tower Hill, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the construction of ships and shields."—Dated 11th April, 1862.

1051. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in fire arms."—A communication to him from The Society Cordier and Company, of Paris, in the empire of France.—Dated 11th April, 1862.

1052. James Howard, Agricultural Engineer, and Edward Tenney Bousfield, Engineer, both of Bedford, and Thomas Phillips, Foreman at the Britannia Iron Works, Bedford, for an invention of "Improved apparatus applicable to steam cultivation."—Dated 11th April, 1862.

1053. Isaac Whitesmith, of Glasgow, in the county of Lanark, North Britain, Machine Maker, for an invention of "Improvements in power looms, and in pirn winding apparatus."—Dated 11th April, 1862.

1054. Joseph Bunnett, of Deptford, in the county of Kent, Engineer, for an invention of "Improvements in revolving shutters, and in machinery for producing the same."—Dated 12th April, 1862.

1055. Nicholas Nussey, of Holbeck, near Leeds, in the county of York, Mechanic, for an invention of "Improvements in machinery or apparatus for preparing and combing wool, flax, hair, cotton, silk, and other fibrous materials."—Dated 12th April, 1862.

1056. Ernest Bolleé, of Le Mans, department of La Sarthe, in the empire of France, Founder, for an invention of "A new hydraulic ram."—Dated 12th April, 1862.

1057. Andrew Sweet, of Hampstead Road, in the county of Middlesex, Ironmonger, for an invention of "Certain improvements in locks and latches."—Dated 12th April, 1862.

1058. Edgar Drewett, of Blackheath, in the county of Kent, Photographer, for an invention of "Improvements in bottles and other vessels whereby to separate and retain sediment from their contents."—Dated 12th April, 1862.

1059. Archibald Samuels Campbell, of Hampstead, in the county of Middlesex, Gentleman, for an invention of "Improvements in surface condensers."—Dated 12th April, 1862.

1060. Archibald Samuels Campbell, of Hampstead, in the county of Middlesex, Gentleman, for an invention of "Improvements in the refrigeration of liquids."—Dated 12th April, 1862.

1061. James Park, of Bury, in the county of Lancaster, Engineer, for an invention of "Certain improvements in or applicable to steam engines."—Dated 14th April, 1862.

1062. Edward Peyton, of Birmingham, in the county of Warwick, Manufacturer, and William Fothergill Batho, of the same place, Manager, for an invention of "Improvements in angle iron, applicable to metallic bedsteads, roofs, bridges, and other similar purposes."—Dated 14th April, 1862.

1063. John Frederick Spencer, of Newcastle-on-Tyne, Consulting Engineer, for an invention of "Improvements in steam engines."—Dated 14th April, 1862.

1064. Henry Clay Lee, of 11, Lawrence Poultney Lane, in the city of London, Engineer, for an invention of "Improvements in knitting machines."—Dated 14th April, 1862.

1065. Frederick Tolhausen, Civil Engineer and Patent Agent, of No. 17, Rue du Faubourg Montmartre, Paris, in the empire of France, for an invention of "A telegraphic dial printing apparatus."—A communication from Jean Baptiste Rousse and Henry Vivès, two persons resident at No. 17, Rue du Faubourg Montmartre aforesaid.—Dated 14th April, 1862.

1066. John Beard, of Leonard Stanley, in the county of Gloucester, Mechanical Engineer, for an invention of "An improvement or improvements in sofa beds or sofa bedsteads."—Dated 14th April, 1862.

1067. James Martin French, of Birmingham, in the county of Warwick, Pianoforte Manufacturer, for an invention of "Improvements in upright pianofortes."—Dated 14th April, 1862.

1068. John Darlington, of 26, Gresham Street, in the city of London, Mining Engineer, for an invention of "Improvements in the arrangement of marine telegraph wires and cables."—Dated 14th April, 1862.

1069. Joseph Kaye Hampshire, of the parish of Whittington, in the county of Derby, Civil Engineer, for an invention of "A safety cage with disconnecting catch to prevent accidents in the working of coal or other mines arising from the over winding or breaking of the ropes or other parts used for hoisting purposes."—Dated 14th April, 1862.

1070. John Dargue, of 63, Cobden Street, Lister Hills, Bradford, in the county of York, for an invention of "Improvements in machinery for preparing and combing wool and other fibrous materials."—Dated 14th April, 1862.

1071. Charles Harratt, of Hornsey Lane, Highgate, in the county of Middlesex, for an invention of "Improvements in the manufacture of masts, yards, and booms."—Dated 14th April, 1862.

1072. James Childs, Gentleman, of Victoria Street, Pimlico, London, for an invention of "Improvements in the manufacture of wax matches."—Dated 14th April, 1862.

1073. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in reaping and mowing machines."—A communication to him from abroad by Ernest Clement, of 23, Boulevart de Strasbourg, Paris, France.—Dated 14th April, 1862.

1074. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in carriages for transporting loads on railways, common roads, and other surfaces."—A communication to him from abroad by Nicolas de Maklakoff, of 8, Rue Geoffroy Marie, Paris, France.—Dated 14th April, 1862.

1075. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in pumps."—A communication to him from abroad by Jean Marie Henri Paul Metivier, of 34, Rue Keller, Paris, France.—Dated 14th April, 1862.

1076. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "An improved hobby horse."—A communication to him from abroad by Amedée Constant Ponceau, of Rue des Vieux Augustins, Paris, France.—Dated 14th April, 1862.

Notices to Proceed.

NOTICE is hereby given, that

3022. JAMES WAKENELL, of Hitchin, in the county of Hertford, Master of the Workhouse, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in the construction of invalid bedsteads, convertible into other articles of furniture for the use of invalids."

3024. And GERARD RALSTON, of 21, Tokenhouse Yard, London, has given the like notice in respect of the invention of "Improvements in the mode of preparing and applying a certain material on the hulls of iron or wooden ships, or on the surfaces of materials for building the same, also for preventing oxidation and tubercles in iron water pipes." —A communication to him from abroad by Jacob Snider, jun., of Pennsylvania, United States of America, now residing at Paris, empire of France.

As set forth in their respective petitions, both recorded in the said office on the 2nd day of December, 1861.

3026. And ROBERT ANDERSON RÜST, of 34, Great Marlborough Street, Westminster, in the county of Middlesex, Pianoforte Manufacturer, has given the like notice in respect of the invention of "Improvements in the construction of the cases of pianofortes."

As set forth in his petition, recorded in the said office on the 3rd day of December, 1861.

3048. And JOHN KNOWELDEN, of Southwark, in the county of Surrey, Engineer, has given the like notice in respect of the invention of "Improvements in pumps."

As set forth in his petition, recorded in the said office on the 5th day of December, 1861.

3057. And ADAM WOODWARD, ROBERT WOODWARD, and WILLIAM WOODWARD, all of the city of Manchester, in the county of Lancaster, Engineers, have given the like notice in respect of the invention of "Improved arrangements of compound steam-engines."

3062. And FREDERICK VETTERLIN, of No. 14, Scarborough Street, Goodman's Fields, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in breech-loading ordnance, and the projectiles to be used therewith, which may also be applied to small arms."

3065. And HEINRICH GOTTFRIED SCHRAMM, of 149, Rothenburgsort, Hamburgh, has given the like notice in respect of the invention of "Improvements in rotatory engines and pumps."—The result partly of a communication from abroad made to him by Edward Rôsch, resident at Lindenau, in the kingdom of Saxony, and partly of invention and discovery made by himself.

As set forth in their respective petitions, all recorded in the said office on the 6th day of December, 1861.

3069. And RICHARD JOLLEY, of 47, St. John Street, Smithfield, in the county of Middlesex, has given the like notice in respect of the invention of "An improved apparatus for heating, cooling, or drying, infusing, extracting, or absorbing vapours or gases for manufacturing medical or domestic purposes, and for preserving liquids and solids alimentary or otherwise."

3072. And WILLIAM NELSON HUTCHINSON, of Devonport, in the county of Devon, a Major-General in Her Majesty's Army, has given the like notice in respect of the invention of "Improvements in projectiles and ordnance, and in apparatus to be used therewith."

3075. And THOMAS MELLODEW, of Oldham, in the county of Lancaster, Manufacturer, CHARLES WILLIAM KESSELMEYER, of Manchester, in the said county, Warehouseman, and JOHN MAYO WORRALL, of Salford, in the said county, Dyer, have given the like notice in respect of the invention of "Improvements in dyeing and printing certain descriptions of woven fabrics."

3076. And BALTHASAR WILHELM GERLAND, of Newton-le-Willows, in the county of Lancaster, Chemist, has given the like notice in respect of the invention of "Improvements in the manufacture of sulphate of copper and other salts of the same metal."

As set forth in their respective petitions, all recorded in the said office on the 7th day of December, 1861.

3090. And HECTOR ALEXANDER, of Glasgow, in the county of Lanark, North Britain, Gas Burner Manufacturer, has given the like notice in respect of the invention of "Improvements in turning apparatus for making gas burners."

099. And DAVID VOGL, of Sambrook Court, Basinghall Street, in the city of London, has given the like notice in respect of the invention of "Improvements in garments for gentlemen and ladies' wear."

3100. And JOHN WASHINGTON AGNEW, of the city of London, in West Canada, but at present at Windsor Chambers, Great St. Helens, in the city of London, Gentleman, has given the like notice in respect of the invention of "A new and improved electro-voltaic pocket battery."—The result partly of a communication made to him from abroad by Henry Palmer, of the city of London, in West Canada, and is partly an invention and discovery made by him."

As set forth in their respective petitions, all recorded n the said office on the 10th day of December, 1861.

3109. And JOHN POTTER, of Leeds, in the county of York, a Partner in the firm of Henry Joseph Morton and Co., of the same place, Wire Fencing Manufacturers, has given the like notice in respect of the invention of "An improved mode of jointing or connecting telegraph wires, which is also applicable to jointing or connecting signal wires, fencing wires, and other wires or rods."

As set forth in his petition, recorded in the said office on the 11th day of December, 1861.

3115. And WILLIAM EDWARD WILEY, of No. 34, Great Hampton Street, Birmingham, in the county of Warwick, Gold Pen and Pencil-case Manufacturer, has given the like notice in respect of the invention of "An improvement or improvements in pencil-cases and holders for crayons and other solid writing or marking materials, which improvement or improvements may also be applied to crochet needle holders."

3117. And William Smith Longridge, of Alderwasley Iron Works, in the county of Derby, Engineer, has given the like notice in respect of the invention of "Improvements in railway engines and tyres."

3118. And Augustus Tonnar, of Eupen (Rhénish Prussia), Brewer, has given the like notice in respect of the invention of "Improvements in the method of and apparatus for drying and cleansing malt, as well as any other species of grain and seed intended for brewing, distilling, and agricultural purposes."

As set forth in their respective petitions, all recorded in the said office on the 12th day of December, 1861.

3129. And John Walter Friend, of Freemantle, Southampton, has given the like notice in respect of the invention of "Improvements in apparatus for registering the depth and flow of liquids, and the distances run by ships at sea."

3137. And Henry Appleby, of 4, Tavistock Place, Plumstead Common, in the county of Kent, Gentleman, and Henry Harrison, of the Grand Junction Works, Northampton, Engineer, have given the like notice in respect of the invention of "Improvements in machinery for boring wood and other materials used in the manufacture of brooms and brushes."

As set forth in their respective petitions, both recorded in the said office on the 13th day of December, 1861.

3155. And David Chalmers, of Glasgow, in the county of Lanark, North Britain, Machinist, has given the like notice in respect of the invention of "Improvements in looms for weaving, and in the manufacture of cloth therefrom."

3158. And Charles Baumann, of Altdorf Weingarten, Wurtemberg, has given the like notice in respect of the invention of "Improvements in buttons."

As set forth in their respective petitions, both recorded in the said office on the 16th day of December, 1861.

3162. And Robert Shaw, of Marple, in the county of Chester, Mechanic, has given the like notice in respect of the invention of "Certain improvements in' carding engines.'"

As set forth in his petition, recorded in the said office on the 17th day of December, 1861.

3181. And Theodore Bourne, of the city and county of New York, state of New York, United States of America, residing at 16, Charlotte Street, Bedford Square, W.C., London, has given the like notice in respect of the invention of "Improvements in cotton gins."—A communication to him from abroad by Hiram Wilson Brown, of Millville, Cumberland county, state of New Jersey, United States of America, the inventor.

As set forth in his petition, recorded in the said office on the 19th day of December, 1861.

3199. And Eugene Etienne Pereau, of Moorgate Street, in the city of London, Merchant, has given the like notice in respect of the invention of "An improved composition for cleaning and revivifying woollen cloths and other fabrics, and the colours thereof."—A communication to him from abroad by Alfred Thomas, of Paris, France.

As set forth in his petition, recorded in the said office on the 20th day of December, 1861.

3212. And William Kempe, of Holbeck Mills, Leeds, has given the like notice in respect of the invention of "Improvements in scrays or tables applicable to gig mills, brushing mills, and other like machinery."

As set forth in his petition, recorded in the said office on the 21st day of December, 1861.

3215. And Louis Rudolph Bodmer, of No. 2, Thavies Inn, Holborn, in the city of London, has given the like notice in respect of the invention of "Improvements in looms for the manufacture of sacks, knapsacks, mattress cases, and other goods."—A communication to him from abroad by Charles Hippolyte Tessier, of Paris, in the French empire, Gentleman.

As set forth in his petition, recorded in the said office on the 24th day of December, 1861.

3241. And Peter Armand le Comte de Fontainemoreau, of No. 4, South Street, Finsbury, London, Patent Agent, has given the like notice in respect of the invention of "Improvements in treating fatty and resinous bodies, either in a neutral or acid state."—A communication from Charles Monier, a person resident at St. Ouen, Paris.

As set forth in his petition, recorded in the said office on the 27th day of December, 1861.

3249. And Edward Lord, of Todmorden, in the county of York, Machine Maker, has given the like notice in respect of the invention of "Certain improvements in machinery for preparing cotton and other fibrous substances."

3251. And Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in fire-arms, and in adapting bayonets or cutting or piercing weapons thereto."—A communication to him from abroad by Mathieu Louis Michel Descoutures, of 33, Boulevard St. Martin, Paris, France.

As set forth in their respective petitions, both recorded in the said office on the 28th day of December, 1861.

3257. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the manufacture of cube sugar."—A communication to him from abroad by Gustavus Finken, of Brooklyn, King's county, state of New York, United States of America.

As set forth in his petition, recorded in the said office on the 30th day of December, 1861.

3269. And William Henry Bailey, of Salford, in the county of Lancaster, Turret Clock Maker, has given the like notice in respect of the invention of "Certain improvements in sewing machines."

As set forth in his petition, recorded in the said office on the 31st day of December, 1861.

37. And Arthur Warner, of No. 31, Threadneedle Street, in the city of London, Merchant, has given the like notice in respect of the invention of "Improvements in preparing materials for and in purifying coal gas."

As set forth in his petition, recorded in the said office on the 4th day of January, 1862.

44. And Frederick Shaw, Bookkeeper, of Sheffield, in the county of York, has given the like notice in respect of the invention of "Improvements in apparatus for stopping railway trains."
As set forth in his petition, recorded in the said office on the 7th day of January, 1862.

67. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for carburetting and burning gas."—A communication to him from abroad by Leon Farrenc and Henri Glocsener, both of Paris, France.
As set forth in his petition, recorded in the said office on the 9th day of January, 1862.

151. And John Adams Knight, of No. 4, Symond's Inn, Chancery Lane, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improvements in the permanent way of railways."—A communication to him from abroad by Hiram Carpenter, of the city of New York, in the United States of America.
As set forth in his petition, recorded in the said office on the 21st day of January, 1862.

240. And William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the boxes for the journals of railroad carriage and other axles."—A communication to him from abroad by Davis Henry Dotterer, of Chicago, in the county of Cook, state of Illinois, United States of America.
As set forth in his petition, recorded in the said office on the 29th day of January, 1862.

311. And Adam Carlisle Bamlett, of Middleton Tyas, near Richmond, in the county of York, Farmer, has given the like notice in respect of the invention of "Improvements in reaping and mowing machines."
As set forth in his petition, recorded in the said office on the 6th day of February, 1862.

364. And Godfrey Joachim Aman, of Liverpool, in the county of Lancaster, Merchant, has given the like notice in respect of the invention of "Improvements in envelopes or bags to hold grain or similar substances for transmission by post or as parcels."
As set forth in their petition, recorded in the said office on the 12th day of February, 1862.

392. And Edwin Green, of the firm of Green and Cadbury, Button Manufacturers, of Birmingham, in the county of Warwick, and James Newman, Jeweller, also of Birmingham aforesaid, have given the like notice in respect of the invention of "Certain improvements in buttons for fastening and ornamenting articles of dress."
As set forth in their petition, recorded in the said office on the 13th day of February, 1862.

472. And James Kirkwood, of Paisley, in the county of Renfrew, North Britain, Manufacturer, has given the like notice in respect of the invention of "Improvements in looms for weaving."

478. And James Peterkin Douglas Camp, of the International Patent Agency, 100, Fleet Street, in the city of London, has given the like notice in respect of the invention of "Improvements in the arrangement of valves for steam and other engines, and in the means of operating the same."—A communication to him from abroad by Henry Steele, of Jersey City, state of New Jersey United States of America.
As set forth in their respectvie petitions, both recorded in the said office on the 22nd day of February, 1862.

667. And William Henry Latham, of Bolton, in the county of Lancaster, Foreman, and Frederick Cartwright Ward Latham, of the same place, Printer, have given the like notice in respect of the invention of "Certain improvements in machinery or apparatus for perforating and numbering paper or other substances to be employed as 'tickets,' or where other 'counter registration' is required."

668. And William Henry Latham, of Bolton, in the county of Lancaster, Foreman, and Frederick Cartwright Ward Latham, of the same place, Printer, have given the like notice in respect of the invention of "Certain improvements in machinery or apparatus for cutting paper, pasteboard, and other similar substances."
As set forth in their respective petitions, both recorded in the said office on the 12th day of March, 1862.

687. And James Wadsworth, of Salford, near Manchester, in the county of Lancaster, Machinist, has given the like notice in respect of the invention of "Improvements in the construction and manufacture of moveable or adjustable heels for boots and shoes."
As set forth in his petition, recorded in the said office on the 13th day of March, 1862.

737. And William Barber, of Stockport, in the county of Chester, has given the like notice in respect of the invention of "Improvements in the manufacture of hats."
As set forth in his petition, recorded in the said office on the 17th day of March, 1862.

822. And Alfred Fryer, of Manchester, in the county of Lancaster, Sugar Refiner, has given the like notice in respect of the invention of "Improvements in the manufacture of sugar, and in separating liquids from sugar and other substances."

829. And John Thomas Loft, of Brooklyn, New York, United States of America, but now residing at Berwick Street, Pimlico, in the county of Middlesex, Architect, has given the like notice in respect of the invention of "Improved machinery for covering strips of metal and wire."
As set forth in their respective petitions, both recorded in the said office on the 25th day of March 1862.

832. And John Wilson, Hotpresser and Calenderer, in Glasgow, in the county of Lanark, has given the like notice in respect of the invention of "Improvements in the apparatus used for, and in the method of, hotpressing or finishing plaids, shawls, handkerchiefs, and other woven fabrics."
As set forth in his petition, recorded in the said office on the 26th day of March, 1862.

844. And WILLIAM GREENWAY, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of bolts for fastening doors, and for other like purposes."
As set forth in his petition, recorded in the said office on the 27th day of March, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Notice of Application for Leave to enter a Disclaimer and Memorandum of Alteration.

NOTICE is hereby given, that

RICHARD CHRISTOPHER MANSELL, of Ashford, in the county of Kent, Gentleman, to whom Letters Patent were granted on the 1st day of June, 1848, for "Certain improvements in the construction of vehicles used on railways or on common roads," has applied by petition to Her Majesty's Solicitor-General for the leave and fiat of the said Solicitor-General, to enter a Disclaimer and Memorandum of Alteration, for the purpose of disclaiming certain parts of the Specification of the said invention, as in the said petition mentioned, and also altering certain parts of the Specification of the said invention in the said petition also mentioned. —Dated this 9th day of April, 1862.

JOHN GEDGE and SON,
No. 11, Wellington Street, Strand,
Agents for the above-named Petitioner.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 12th April*, 1862, *inclusive.*)

7th April.

932. JOHN LEE STEVENS, of No. 1, Fish Street Hill, in the city of London, Civil Engineer, for an invention of "Improvements in the fire grates of locomotive, marine, and other furnaces."—Dated 13th April, 1859.

8th April.

899. RUDOLPH WAPPENSTEIN, of the city of Manchester, in the county of Lancaster, Medallion Engraver, for an invention of "Improvements in cop tubes, and in machinery or apparatus for placing the same on the spindles used for spinning and doubling fibrous materials." — Dated 11th April, 1859.

9th April.

890. JOHN HAWKINS, of Lisle Street, London, in the county of Middlesex, and of Walsall, in the county of Stafford, Bit, Spur, and Stirrup Manufacturer, for an invention of "Certain improvements in the manufacture of stirrups, bits, spurs, buckles, and other such like articles connected with harness and saddlery."—Dated 9th April, 1859.

922. SAMUEL TATTON, of Leek, in the county of Stafford, Silk Dyer, for an invention of "Improvements in preparing and treating silk and improvements in dyeing silk."—Dated 12th April, 1859.

10th April.

921. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent, for an invention of "Improvements in the preparation of red dyes." — A communication from abroad by Messrs. Renard, Frères, of Lyons. —Dated 12th April, 1859.

951. HUGH ADAMS SILVER, of Cornhill and Bishopsgate Street Within, in the city of London, and Silver Town, in the county of Essex, India rubber Manufacturer, for an invention of "Improvements in insulating wire for electric telegraphs." —Dated 15th April, 1859.

997. LUCIUS PHELPS PORTER, of New York, for an invention of "Improvements in knitting-machinery."—A communication from abroad by Joseph R. Kilbourn and Edward E. Kilbourn, of Norfolk, in the county of Litchfield, and state of Connecticut.—Dated 20th April, 1859.

1100. DANIEL MOORE, of Brooklyn, in the state of New York, United States of America, for an invention of "Improvements in machinery for rubbing or dressing types."—Dated 2nd May, 1859.

12th April.

938. JOSEPH BEATTIE, of Lawn Place, South Lambeth, in the county of Surrey, Engineer, for an invention of "Improvements in the means of preventing locomotive engines and carriages in motion on railways leaving or running off the rails."—Dated 14th April, 1859.

960. HENRY HARRISON, of the firm of Joseph Harrison and Sons, of Blackburn, in the county of Lancaster, Machine Makers, for an invention of "Certain improvements in looms for weaving." —Dated 16th April, 1859.

961. JOHN SIDEBOTTOM, of Broadbottom, near Mottram, in the county of Chester, Cotton Spinner and Manufacturer, for an invention of "Improvements in the construction of tubes and partial tubes, and in the machinery or apparatus for placing them on the spindles of machines used in spinning, doubling, winding, and warping, also improvements in machinery for making such tubes and partial tubes."—Dated 16th April, 1859.

1050. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of

"Improvements in machinery or apparatus for combing wool and other fibrous substances." —A communication from abroad by Cullen Whipple, of the city and county of Providence, in the state of Rhode Island, United States of America.—Dated 26th April, 1859.

Patent on which the Stamp Duty of £50 has been Paid.

12th April, 1862.

924. William Arena Martin and James Purdie, of Woolwich, in the county of Kent, Engineers, for an invention of "Improvements in fire-bars."—Dated 13th April, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 12th April*, 1862, *inclusive.*)

5th April.

663. John McKinnell, of Glasgow in the county of Lanark, North Britain, Gentleman, for an invention of "Improvements in ventilation."—Dated 26th March, 1855.

9th April.

789. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for preparing cotton and other fibrous substances."—A communication from Jean Beugger, of Wülflingen, Switzerland.—Dated 10th April, 1855.

10th April.

805. James Lee Norton, of Holland Street, Blackfriars, for an invention of "Improvements in separating wool and other animal fibres from vegetable matters, and in drying wool and other animal fibres."—Dated 11th April, 1855.

816. James Templeton, of Glasgow, in the county of Lanark, North Britain, Manufacturer, for an invention of "Improvements in the manufacture of pile fabrics."—Dated 13th April, 1855.

12th April.

823. George Turner, of Northfleet, in the county of Kent, for an invention of "Certain improvements in the construction and fitting of tents and marquees."—Dated 13th April, 1855.

FOREIGN PATENTS.

PRUSSIA.*

List of Patents Delivered and Annulled between the 1st and 28th February, 1862.

(*Communicated by His Excellency the Minister of Commerce and Public Works.*)

Patents delivered.

1. Licht, of Danzig, and Friedrich Hoffmann, of Berlin, for "A process for the manufacture of artificial sandstone."—5 years.—Dated 3rd February, 1862.
2. Borsig, of Berlin, for "A peculiar apparatus for evaporating sugar, salt, and other liquids."—5 years.—Dated 11th February, 1862.
3. Borsig, of Berlin, for "A continuous distilling apparatus."—5 years.—Dated 11th February, 1862.
4. Victor Scheidt, of Cologne, for "A kind of combs."—5 years.—Dated 14th February, 1862.
5. J. H. Habrich, of Sudenburg, near Magdeburg, for "An apparatus for decanting the residue of sugar-works and similar substances."—5 years.—Dated 15th February, 1862.
6. Fr. Wilhelm Albert Grassée, of Königstein, for "Manufacture of vinegar."—5 years.—Dated 18th February, 1862.
7. Ewald Hilger, of Essen, for "A mechanism for drying wool."—5 years.—Dated 28th February, 1862.

2. Patents annulled.

1. J. H. F. Prillwitz, of Berlin, for "A blast-furnace for the manufacture of zinc."—5 years.—Dated 27th October, 1860; ann. 4th February, 1862.
2. August Schulz, of Parey, for "A machine for sowing rapeseed."—5 years.—Dated 7th December, 1860; ann. 18th Feb. 1862.

* For the Prussian Patent Law, see Nos. 313 and 329 of this Journal.

Errata in Journal of 11th April, 1862.

Page 493, col. 1. List of Patents, &c. For "11th March," read "18th March."

898. For "markers, butts," read "markers' butts."

List of Specifications published during the week ending 12th April, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
2185	10*d.*	Clark, W. — (*A communication from A. Grivel, junior.*)—Railway signal apparatus.
2186	6*d.*	Müller, W.—Apparatus for roasting coffee, cocoa, &c.
2187	6*d.*	Hall, J.—Portable pumps or engines for extinguishing fires, &c.
2188	7*d.*	Watson, J.—Furnaces.
2189	1*s.* 3*d.*	Alcan, E. — (*A communication from C. Martin.*)—Carding and combing wool, &c
2190	5*d.*	Saleres, A. N.—Printing and coloring paper, chintz, &c.
2191	3*d.*	Knight, G.—Giving lustre to written and printed letters, &c.
2192	1*s.* 4*d.*	Campion, W., and Johnson, H.—Cutting selvedges.
2193	7*d.*	Ward, D.—Twisting and laying flax, hemp, &c.
2194	3*d.*	Gresham, J. — Stopping and starting omnibuses, &c.
2195	10*d.*	Suckow, E., and Habel, E.—Blast.
2196	3*d.*	Robertson, P. — Treating yeast and manufacturing ammoniacal salts, &c.
2197	4*d.*	Bischof, G., junior.—*Partly a communication from G. Bischof.*)—Extracting copper and silver from ores.
2198	5*d.*	White, A.—Stopping railway trains.
2199	3*d.*	Scott, T.—Roadways.
2200	3*d.*	Brooman, R. A. —(*A communication from G. Tautain.*)—Parachute toy.
2201	10*d.*	Newton, W. E. — (*A communication from L. I. Molinos.*)—Self-acting railway brakes.
2202	10*d.*	Bodmer, L. R.—(*A communication from E. A. Egrot.*)—Distilling apparatus.
2203	1*s.* 2*d.*	Schneider, F. E. — Cartridges for breech-loading fire-arms.
2205	3*d.*	Young, H.—Beer engines.
2206	10*d.*	McConnel, R.—Locks.
2207	10*d.*	Rowan, J. M., and Horton, T. R.—Steam boilers and surface condensers.
2208	7*d.*	Edkins, C.—Dress suspenders.
2209	10*d.*	Ridges, J. E., and Barker, J.—Composite carriages.
2210	3*d.*	Heyworth, D., and Heyworth, J.—Looms for weaving.
2211	2*s.* 1*d.*	Effertz, P.—Machinery for making bricks, tiles, &c.
2212	3*d.*	Pensam, J. T.—Wheels, &c.
2213	6*d.*	Bennett, F.—Coating the interior of leaden pipes with tin, &c.
2214	3*d.*	Patey, W., junior, and Richardson, J. —Shaving brushes.
2215	3*d.*	Scott, T. – Utilizing the surplus momentum of railway trains.
2216	3*d.*	Napier, J.—Armour plates.
2217	3*d.*	Napier, J.—Cooling water for condensing steam.
2218	3*d.*	Napier, J.—Rolling iron.
2219	3*d.*	Harrison, C. W.—Casters.
2220	10*d.*	Greenwood, T.—Sawing wood.
2221	3*d.*	Reid, J.—Saturating gas.
2222	6*d.*	Mennons, M. A. F.—(*A communication from B. Palazot.*)—Smoke-consuming furnaces.
2223	9*d.*	Mennons, M. A. F.—(*A communication from B. Durand and C. Crozet.*)—Ribbon looms.
2224	9*d.*	Mennons, M. A. F.—*A communication from J. Sturm.*) —Application of the archimedean screw for the production and transmission of motive power.
2225	7*d.*	Spence, W.—(*A communication from F. Sorin.*)—Apparatus for dividing and softening vegetable fibres.
2226	3*d.*	Allott, W., and Thelwall, J.—Wheel tyres, hoops, &c.
2227	3*d.*	Allott, W., and Thelwall, J. — Cranks, shafts, axles, &c.
2228	7*d.*	Hughes, E. J.—(*A communication from A. J. Philippe.*)—Watches.
2229	10*d.*	Kirkman, C. F. — Obaining manure from sewage.
2230	3*d.*	Russell, J. J.—Preparing the ends of welded tubes.
2231	6*d.*	Brown, J.—Power looms for weaving.
2232	6*d.*	Wild, W.—Slubbing and roving frames.
2233	3*d.*	Harrison, E., and Yates, T. S.—Substitute for gunpowder.
2234	10*d.*	Henry, M. — (*A communication from E. Vincenzi.*) – Signalling on railways.
2235	6*d.*	Messenger, T. G.—Glazing horticultural buildings, &c.
2236	3*d.*	Taylor, E.—Obtaining motive power.
2238	6*d.*	Maillard, N. D. P.—Manufacture of potash, pearlash, &c.
2239	3*d.*	Carpendale, J., and Middleton, T.—Chasing silver or Britannia metal.
2240	3*d.*	Norris, G.—Soap.
2241	7*d.*	Holland, J., and Okell, G.—Railway signal.
2242	4*d.*	Redgate, H.—Crinoline skirts.
2243	3*d.*	White, R. O.—Bricks.
2244	7*d.*	Birkbeck, G. H.—(*A communication from L. Friese.*)—Saddles.

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No. of Journal.	Periods embraced by the Lists.
234	A.D. 1852—October to December inclusive
247	A.D. 1853—January to March ,,
268	,, April to June ,,
291	,, July to September ,,
321	,, October to December ,,
345	A.D. 1854—January to March ,,
371	,, April to June ,,
399	,, July to September ,,
424	,, October to December ,,
451	A.D. 1855—January to March ,,
475	,, April to June ,,
505	,, July to September ,,
527	,, October to December ,,
553	A.D. 1856—January to March ,,
579	,, April to June ,,
605	,, July to September ,,
632	,, October to December ,,
660	A.D. 1857—January to March ,,
684	,, April to June ,,
712	,, July to September ,,
737	,, October to December ,,
761	A.D. 1858—January to March ,,
789	,, April to June ,,
815	,, July to September ,,
842	,, October to December ,,

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815	,, July to September ,,
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No. 865. FRIDAY, APRIL 18, 1862. Price 2d.

Applications for Letters Patent.

(15*th and* 16*th April*, 1862.)

1077. Charles James Coxhead, of No. 10, Emeis Terrace, Kentish Town, in the county of Middlesex, late of Castle Street, Shrewsbury, in the county of Salop, for an invention of "Improvements in pianoforte actions."—Dated 15th April, 1862.

1078. George Fell, Leather Manufacturer, and William Haynes, Manager, both of Bolton, in the county of Lancaster, for an invention of "Improvements in machinery or apparatus to be used in the manufacture of leather."—Dated 15th April, 1862.

1079. Jacob Taylor, of Lyon Mill, Oldham, in the county of Lancaster, Cotton Spinner, for an invention of "Improvements in machinery or apparatus for preparing cotton or other fibrous materials to be spun."—Dated 15th April, 1862.

1080. Thomas Harper Bennett, of Winchester House, Southwark, in the county of Surrey, Hat Manufacturer, for an invention of "Improvements in the manufacture of hats, caps, or other coverings for the head."—Dated 15th April, 1862.

1081. François Alexandre Le Mat, of New Orleans, in the United States of America, Colonel Aide-de-camp, and Charles Frederic Girard, of Washington, in the United States of America, Doctor of Medicine, for an invention of "Improvements in the construction of revolving and repeating fire-arms, part of which invention is also applicable to other arms."—Dated 15th April, 1862.

1082. Richard Roche, of Southsea, in the county of Hants, Lieutenant Royal Navy, for an invention of "An improvement in gun carriages."——Dated 15th April, 1862.

1083. Charles Rogers Heap, of Great George Street, in the city of Westminster, Agent, for an invention of "An improved construction of railway chair."—A communication to him from abroad by Antonio Gabrielli, now residing at Turin, in the kingdom of Italy.—Dated 15th April, 1862.

1084. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improvements in the manufacture of blasting powder."—A communication to him from abroad by Messieurs Wynants and Esselens, of Ixelles, in the kingdom of Belgium.—Dated 15th April, 1862.

1085. George Bedson, of Manchester, in the county of Lancaster, Manager, for an invention of "Improvements in the manufacture of wire ropes, and in the preparation of wire for such manufacture."—Dated 15th April, 1862.

1086. John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Cheetham, of Moscow, in the empire of Russia, but now residing at Oldham aforesaid, Manager, for an invention of "Improvements in looms for weaving."—Dated 15th April, 1862.

1087. John Platt, of Oldham, in the county of Lancaster, and William Richardson, of the same place, Mechanical Engineers, for an invention of "Improvements in machinery or apparatus for cleaning wool and other hairs of animals from burrs and other foreign matters."—Dated 15th April, 1862.

1088. Richard Atkinson Peacock, of St. Helier, in the Island of Jersey, Civil Engineer, for an invention of "Improvements in constructing and working lock gates for docks, harbours, canals, and navigable rivers."—Dated 15th April, 1862.

1089. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in ornamenting fabrics and other surfaces."—A communication to him from abroad by Messrs. Eugène Siess, Calico Printer, and Charles Prosper Coin-

dreau, Merchant, both of 29, Boulevart St. Martin' Paris.—Dated 15th April, 1862.

1090. Thomas Wood Gray, of 114, Fenchurch Street, in the city of London, for an invention of "Improvements in the manufacture of explosive compounds." — A communication to him from abroad by Julian John Revy, a person resident at Vienna.—Dated 15th April, 1862.

1091. Ferdinand Carl Philippson, of Münzstrasse, Berlin, in the kingdom of Prussia, for an invention of "Improvements in steam hammers." —A communication to him from abroad by Louis Schwartzkopff, a person residing at Chausséetrasse, Berlin, aforesaid.—Dated 15th April, 1862.

1092. James Crossdale, of No. 2, Rotherfield Street, Islington, in the county of Middlesex, Boot Maker, for an invention of "Certain improvements in boots and shoes for ventilating same."—Dated 15th April, 1862.

1093. Rupert Rains, of No. 4, Crescent, Bridge Street, Blackfriars, in the county of Middlesex, for an invention of "Improvements in apparatus for freezing, cooling, and churning."—A communication to him from abroad by Georges Toselli, of No. 174, Faubourg Saint Martin, Paris, in the empire of France.—Dated 15th April, 1862.

1094. Stephen Barrett, Machinist, of 8, Clifton Street, Finsbury, in the county of Middlesex, for an invention of "Improvements in projectiles." —Dated 16th April, 1862.

1095. Frederic Newton Gisborne, of No. 3, Adelaide Place, London Bridge, in the city of London, Engineer and Electrician, for an invention of "Improvements in the construction of electric targets for rifle and gun practice."—Dated 16th April, 1862.

1096. Thomas Edwards, of Liverpool, in the county of Lancaster, Gas Engineer, and Joseph Harrison, of Liverpool aforesaid, Ironmonger, for an invention of "Improvements in letter-receiving boxes and other like receptacles."—Dated 16th April, 1862.

1097. John Barbour, of Liverpool, in the county of Lancaster, Merchant, for an invention of "Improvements applicable to upholsterers' and other hand hammers."—A communication to him from abroad by William Thomson, of the firm of Thomson and Burns, of the city of Toronto, in Canada."—Dated 16th April, 1862.

1098. Walter Ferguson Lock, of Haylands, near Ryde, in the Isle of Wight, Esquire, for an invention of "An elongated projectile to be shot from smooth bored ordnance, and which shall retain during its flight the longer axis in the direction of its line of flight similarly to elongated projectiles propelled from rifled ordnance."—Dated 16th April, 1862.

1099. John Wilson Hadwen, of Kebroyd Mills, in the parish of Halifax, in the county of York, Cotton Spinner and Manufacturer, for an invention of "Improvements in the treatment and application of soft silk waste."—Dated 16th April, 1862.

1100. David Stott, of the firm of John Whiteley, of Firth House Mills, Stainland, in the county of York, Paper Manufacturers, for an invention of "Improvements in the manufacture of rings from paper, millboard, or pasteboard applicable for steam or other pipe joints, bobbin ends, or other purposes, and in the means or apparatus employed therein, which are also applicable to the manufacture of rings from other flexible substances."—Dated 16th April, 1862.

1101. James Mackay, of Liverpool, in the county of Lancaster, Timber Merchant, for an invention of "Certain improvements in projectiles for fire-arms."—Dated 16th April, 1862.

1102. John Martin Rowan, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in manufacturing articles of cast steel."—Dated 16th April, 1862.

1103. Robert Cochran and Robert Cochran, junior, of Paisley, in the county of Renfrew, North Britain, Manufacturers, for an invention of "Improvements in producing ornamental fabrics."—Dated 16th April, 1862.

1104. Frederic Pelham Warren, of East Court, Cosham, in the county of Hants, Commander in the Royal Navy, for an invention of "Improvements in apparatus for steering sea-going vessels."—Dated 16th April, 1862.

1105. Matthew Cartwright, of St. John's Row, Hoxton, in the county of Middlesex, Dentist, for an invention of "Improvements in the manufacture of models, and of plates or pieces for artificial teeth, and in combining or amalgamating india rubber and gutta percha with metals for the manufacture of artificial plates or pieces, and for other purposes."—Dated 16th April, 1862.

1106. William John Marsden, of Sheffield, in the county of York, for an invention of "Improvements in eye shades."—Dated 16th April, 1862.

1107. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improvement in setting artificial teeth."—A communication to him from abroad by David Steinberg, of the city and county of San Francisco, United States of America. — Dated 16th April, 1862.

1108. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of cannon and other ordnance, and of solid and hollow cylinders for shafting and other purposes of wrought iron or steel, or both combined."—A communication to him from abroad by David Tomlinson Yeakel, of Lafayette, state of Indiana, United States of America.—Dated 16th April, 1862.

1109. John Stanton, of Birmingham, in the county of Warwick, Engine Fitter, for an invention of "Improvements in apparatus or machinery to be used in stamping or piercing metal washers and other similar articles."—Dated 16th April, 1862.

1110. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for cutting the teeth of wheels, racks, or segments."—A communi-

cation to him from abroad by Messieurs Schultz, Brothers, of Mayence, in the kingdom of Prussia, Engineers.—Dated 16th April, 1862.

1111. John Ashbury, of Manchester, in the county of Lancaster, Contractor, for an invention of "Improvements in the permanent way of railways."—Dated 16th April, 1862.

1112. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in railway and common road carriages."—A communication to him from abroad by Claude Marie Bathias, of Paris, in the empire of France.—Dated 16th April, 1862.

1113. John William Ford, of Shooters Hill, in the county of Kent, for an invention of "Improvements in sewing machines."—A communication to him from abroad by Gordon McKay, of Boston, and Robert Henry Mathies, of Manchester, both in the United States of America.—Dated 16th April, 1862.

1114. John Weston, of 80, Upper Whitecross Street, St. Luke's, in the county of Middlesex, Engineer, for an invention of "Improvements in machinery for morticing, drilling, and dove-tailing, and in tools to be used therewith."—Dated 16th April, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

3068. To George Clark, of No. 30, Craven Street, Strand, London, for the invention of "Improvements in the use, application, and manufacture of iron or steel as armour for ships or batteries."

On his petition, recorded in the Office of the Commissioners on the 7th day of December, 1861.

3163. To John Dale, of Manchester, in the county of Lancaster, Manufacturing Chemist, for the invention of "Improvements in the manufacture of glue or size."

On his petition, recorded in the Office of the Commissioners on the 17th day of December, 1861.

17. To John Jacob Gutknecht, of Neuhof, near Fizers, Switzerland, Engineer, for the invention of "Improvements in meters for measuring gas, water, and other fluids."

On his petition, recorded in the Office of the Commissioners on the 1st day of January, 1862.

118. To John Adams Knight, of No. 4, Symonds Inn, Chancery Lane, in the county of Middlesex, Patent Agent, for the invention of "Improvements in machinery for dressing mill-stones by means of a diamond cutter."—A communication to him from abroad by John Dickinson, of New York, United States of America.

On his petition, recorded in the Office of the Commissioners on the 16th day of January, 1862.

238. To Benjamin Foster, of Denholme, in the county of York, Manufacturer, and John Moore, of the same place, Manager, for the invention of "Improvements in machinery or apparatus for spinning and doubling wool and other fibrous materials."

On their petition, recorded in the Office of the Commissioners on the 29th day of January, 1862.

521. To Jacques Dothée, of Paris, France, Gentleman, for the invention of "Improvements in the colouring or dyeing of horse-hair tresses, hats, or ornaments."

On his petition, recorded in the Office of the Commissioners on the 26th day of February, 1862.

605. To George Lawrence, of Newton Terrace, Westbourne Grove, in the county of Middlesex, for the invention of "Improvements in the manufacture of flesh gloves and flesh straps."

On his petition, recorded in the Office of the Commissioners on the 6th day of March, 1862.

639. To Charles Massi, of 13, Greville Street, Holborn, in the county of Middlesex, Philosophical Apparatus Manufacturer, for the invention of "Improvements in means and apparatus for retarding and stopping carriages used on railways or common roads."

On his petition, recorded in the Office of the Commissioners on the 10th day of March, 1862.

666. To John Fawcett, of New Swindon, in the county of Wilts, Smith, for the invention of "Certain improvements in the manufacture of cranks and crank axles for locomotive and other engines."

673. And to Paul Gondolo, of 29, Boulevart St. Martin, Paris, in the empire of France, Merchant, for the invention of "A new or improved baking oven."

On both their petitions, recorded in the Office of the Commissioners on the 12th day of March, 1862.

681. To Fortune Hippolyte Fontaine, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, for the invention of "A process for reproducing photographies, drawings, paintings, and engravings engraved on metal."

On his petition, recorded in the Office of the Commissioners on the 13th day of March, 1862.

742. To William Gossage, of Widnes, in the county of Lancaster, Chemist, for the invention of "Improvements in the manufacture of soda and potash."

On his petition, recorded in the Office of the Commissioners on the 17th day of March, 1862.

754. To André Alexandre Beaumont and Joseph Augustin Escalier, of 2, Rue Ste. Appoline, Paris, France, and of 4, South Street, Finsbury, London, for the invention of "A new kind of flying top."

On their petition, recorded in the Office of the Commissioners on the 18th day of March, 1862.

780. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the manufacture of soap."—A communication to him from abroad by Mr. Antoine Auguste Mollard, of 29, Boulevart St. Martin, Paris, Merchant.

On his petition, recorded in the Office of the Commissioners on the 20th day of March, 1862.

814. To JOHN TOPHAM, of the town and county of the town of Nottingham, Mechanist, for the invention of "Improvements in apparatus used for cleansing out the scum and removing the sediment from the water in steam boilers, and preventing incrustation therein."

817. And to JOHN STEWART, of Glasgow, in the county of Lanark, North Britain, Plumber, for the invention of "Improvements in the manufacture of cards for Jacquard weaving."—A communication to him from abroad by Louis Joseph Fillion, residing at Grongis, Aisne, France.

On both their petitions, recorded in the Office of the Commissioners on the 24th day of March, 1862.

841. To WILLIAM LOUIS WINANS, of Brighton, in the county of Sussex, Civil Engineer, for the invention of "A new or improved mode of mounting, and apparatus for manœuvring ordnance in land fortifications."

851. To EDWARD HENRY CRADOCK MONCKTON, of 5, Thurloe Place, South Kensington, in the county of Middlesex, Esquire, for the invention of "Improvements in the manufacture of effervescing liquids."

853. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in machinery for preparing, combing, and dressing vegetable fibres."—A communication to him from abroad by John Andrew De Brame, of New York, United States of America.

855. To JOHN EASTERBROOK and JAMES HOBSON ALLCARD, of Sheffield, in the county of York, Manufacturers, for the invention of "Improvements in vices."

857. To SAMUEL ANDERSON EMERY, of Arundel Street, Coventry Street, in the city of Westminster, Comedian, for the invention of "Improvements in the manufacture of soap."

859. And to WILLIAM FORD SMITH and ARTHUR COVENTRY, of "Gresley Iron Works," Ordsal Lane, Salford, in the county of Lancaster, Engineers and Machinists, for the invention of "Improvements in and applicable to lathes and machines for turning and for cutting screws."

On their several petitions, recorded in the Office of the Commissioners on the 27th day of March, 1862.

861. To GEORGE ALLCROFT, of 2, Church Row, Camberwell, in the county of Surrey, for the invention of "Improvements in pressure and vacuum gauges."

863. To WILLIAM AUSTIN ASHE, of Bolton Place, in the county of Middlesex, Gentleman, for the invention of "An improved mode of and apparatus for driving the propelling shafts of ships or vessels."—A communication to him from abroad by Edward David Ashe, of Quebec, in Lower Canada.

864. To WILLIAM BRYER NATION, Analytical Chemist, of Bagley Works, Battersea, in the county of Surrey, for the invention of "Improvements in manufacturing boxes or cases, and in the machinery or apparatus employed therein."

865. To ROBERT ALEXANDER OWEN, of the city of Manchester, in the county of Lancaster, Engineer, for the invention of "Improvements in feathering and varying the pitch of screw propellers for steam ships."

866. To EUGENE THÉODORE NOUALHIER, of Paris, Manufacturer, for the invention of "An improved ventilator."

867. To ANTONIO LUCETTI, of the city of Glasgow, North Britain, Confectioner, for the invention of "Improvements in apparatus for expressing the juice from pulpy fruit."

869. And to EDMUND SMITH, of Hamburg, Gas Meter Manufacturer, for the invention of "Improvements in wet gas meters."

On their several petitions, recorded in the Office of the Commissioners on the 28th day of March, 1862.

871. To ROBERT KAY, of Castleton Print Works, Blue Pits, in the county of Lancaster, Calico Printer, for the invention of "Certain improvements in printing calicoes and other surfaces, and in apparatus connected therewith."

873. To YOUNGS PARFREY, of Upper Belgrave Place, Pimlico, in the county of Middlesex, Engineer, for the invention of "Improvements in breech loading fire-arms."

875. To ISRAEL MORRIS, of Essington, near Wolverhampton, in the county of Stafford, for the invention of "A new or improved machine for breaking up or cultivating land."

876. To CHARLES HENRY TOWNSEND, JAMES YOUNG, and JAMES HANKINS, all of the city of Bristol, for the invention of "An improved method of removing and preventing incrustation in steam boilers."

879. To THOMAS COLE, of the city of Coventry, Licensed Victualler, for the invention of "Improvements in the manufacture of figured ribbons and other textile fabrics."

881. To RICHARD SMITH, of Shaw House, Melksham, in the county of Wilts, Gentleman, and of Pensile, in the parish of Minchinhampton, in the county of Gloucester, for the invention of "Improvements in roller blind apparatus."

883. To EMANUEL BERNARD HART, of New York, in the United States of America, but now residing in London, for the invention of "Improved machinery for cutting cork so as to render the same suitable for stuffing purposes."—A communication to him from abroad by Isachar Zacharie, resident at New York aforesaid.

885. And to WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "An improved mode of applying acoustic apparatus in churches and other buildings and apartments."—A communication to him from abroad by David Dunham Stelle, of New Brunswick, and Abram Van Arsdale, of Newark, both in the state of New Jersey, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 29th day of March, 1862.

889. To ROBERT YOUNG, of Glasgow, in the county of Lanark, North Britain, Millwright and Engineer, for the invention of "Improvements in apparatus for cleaning, separating, washing, and drying grain."

890. To NATHAN FRANKENSTEIN, of 12, Clarendon Villas, Mildmay Park, London, in the county of Middlesex, for the invention of "Improvements in machinery for cutting pointed, conical, and cylindrical corks."—A communication to him from abroad by Mr. H. Hubert, of Linden, Hanover, who is the true and first inventor thereof.

891. To WILLIAM TYLER, of Birmingham, in the county of Warwick, Corn Dealer, for the invention of "A new or improved mixture or composition for feeding dogs and other animals, and poultry."

895. To WILLIAM BARRY LORD, of Plymouth, in the county of Devon, Veterinary Surgeon, Royal Artillery, and FREDERIC HUGHES GILBART, of Brixton, in the county of Surrey, Gentleman, for the invention of "Improvements in loading firearms."

897. To ROBERT CHARLES RANSOME, of Ipswich, in the county of Suffolk, for the invention of "Improvements in thrashing and other machinery where corn or grain is required to be raised from one level to another."

903. And to HENRY POOLEY junior, of the firm of Henry Pooley and Son, of Liverpool, Engineer, for the invention of "Improvements in the construction of weighing machines and weigh bridges."

On their several petitions, recorded in the Office of the Commissioners on the 31st day of March, 1862.

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905. To JOHN TAYLOR GURNEY STONE, of 74, St. John's Road, Hoxton, in the county of Middlesex, Manufacturer, for the invention of "An improved bustle and petticoat."

906. To PIERRE RAYMOND COUCHOUD, of No. 71, Rue de Rambuteau, in the city of Paris, in the empire of France, Lace Manufacturer, for the invention of "A new or improved loom for manufacturing chenille and other lace-work."

907. To CÉLESTIN PHILIPPE GONTARD, of Besançon, in the empire of France, Watch Maker, for the invention of "An improved stopping piece for watches and other time keepers, intended to limit the winding up of the moving spring."

913. To HENRY SMITH, of the Teesdale Iron Works, Stockton-on-Tees, in the county of Durham, for the invention of "Improvements in apparatus used when casting iron or other metal."

915. To HENRY WILLIAM CASLON and GEORGE FAGG, both of Chiswell Street, in the county of Middlesex, Typefounders, for the invention of "Improvements in casting printing types, and in apparatus for rubbing the same."

917. To EDMUND HARTLEY, of Oldham, in the county of Lancaster, Machinist, GEORGE LITTLE, of the same place, Machinist, and JOHN HINCHCLIFFE, of same place, Smith, for the invention of "Improvements in rolling or straightening metal spindles, shafts, or rods of a cylindrical or tapered form."

919. And to HENRY JOSEPH MADGE, of Swansea, in the county of Glamorgan, Tin Plate Manufacturer, for the invention of "Improvements in coating iron sheets or plates, to be used as a substitute for tin or terne plates."

On their several petitions, recorded in the Office of the Commissioners on the 1st day of April, 1862.

925. To SAMUEL WARREN, of Ledbury, in the county of Hereford, Engineer and Agricultural Implement Maker, for the invention of "Improvements in machinery for transmitting motion obtained by animal power to agricultural and other machines."

927. To WILLIAM MALAM, of Skinner Street, in the city of London, Gas Engineer, for the invention of "An improvement in the manufacture of gas, and improved apparatus to be employed in such manufacture."

929. To GEORGE COLLIER and JOHN COLLIER, both of Halifax, in the county of York, Machinists, for the invention of "Improvements in looms for weaving carpets and other pile fabrics."

931. To SAMUEL HUNTER, of 22, Grey Street, Newcastle-upon-Tyne, for the invention of "Improvements in anchors."

933. And to JOHN THOMAS LOFT, of Brooklyn, New York, United States of America, but now residing at Berwick Street, Pimlico, in the county of Middlesex, Architect, for the invention of "Improved machinery for printing in colours."

On their several petitions, recorded in the Office of the Commissioners on the 2nd day of April, 1862.

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952. To JAMES CLARKSON KAY, of Bury, in the county of Lancaster, and WILLIAM HARTLEY, of the same place, Engineers, for the invention of "Certain improvements in steam engines."

958. To HENRY FLETCHER, of No. 5, Cornwall Crescent, Camden Road, in the county of Middlesex, for the invention of "Improvements in valves for hydraulic presses, and in apparatus connected therewith for making or pressing blocks or bricks of coal, or other material."

960. To ANDREW WOODHOUSE, of Hindpool, Barrow-in-Furness, in the county of Lancaster, Brick Manufacturer, and THOMAS HUNTER, the younger, of Hindpool aforesaid, Brick Manufacturer, for the invention of "Improvements in the arrangements of kilns and flues for burning bricks, tiles, quarries, and other like articles, and in utilizing the waste heat of the said kilns, and in stoves for drying bricks, tiles, quarries, and other like articles."

964. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "An improved case for holding balls and reels of cotton, silk, and other threads."—A communication to him from abroad by Théophile Denis Gustave Baudouin, residing at Rue Saint Denis, Paris, France.

968. And to WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "An improvement in projectiles for ordnance."—A communication to him from abroad by Henry Tatem Potter, of Sprague, county of New London, Connecticut, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 4th day of April, 1862.

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970. To JOHN DODDRIDGE HUMPHREYS, of 11, Aldhous Terrace, Barnsbury, in the county of Middlesex, Engineer, for the invention of "Improvements in furnaces and machinery employed in the manufacture of compressed fuel and other matters."

972. To WILLIAM BEGG, of Marsh Lane Foundry, Preston, in the county of Lancaster, Iron Founder, for the invention of "Improvements in consuming smoke, and in furnace bars and bridges for effecting the same."

974. To JOHN COLLING, of Seaham, in the county of Durham, Ship Owner, for the invention of "Improvements in apparatus for reefing ships' sails."

978. And to THOMAS CRITCHLOW, of Bolton-le-Moors, in the county of Lancaster, Engineer, for the invention of "Improvements in planing machines."

On their several petitions, recorded in the Office of the Commissioners on the 5th day of April, 1862.

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980. To CHARLES STEWART DUNCAN, of Monmouth Road North, Bayswater, in the county of Middlesex, for the invention of "An improved method of and apparatus for ventilating, cooling, or suppressing fire in public and private buildings or rooms."

982. To WILLIAM SIMONS, of Renfrew, in the county of Renfrew, North Britain, Ship Builder, for the invention of "Improvements in constructing ships or vessels."

984. And to EDWARD WELCH, of Stratford-on-Avon, in the county of Warwick, Gentleman, for the invention of "Improvements in register stoves and fire grates, and in ovens and kitchen ranges."

On their several petitions, recorded in the Office of the Commissioners on the 7th day of April, 1862.

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990. To WILLIAM STEVEN, of Glasgow, in the county of Lanark, North Britain, Brick Maker and Builder, for the invention of "Improvements in apparatus for moulding or shaping clay for bricks or other like articles."

992. To WILLIAM BEARDMORE, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in steam rams for naval purposes."

994. To JOHN WHITEHOUSE, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "Improvements in the manufacture of metallic door and other knobs, and the ornaments of the pillars of metallic bedsteads, and other articles of like manufacture, and in attaching metallic mounts to china or earthenware knobs and ornaments, and roses for knobs."

996. To CHARLES PEMBERTON CARTER, of Kennington Hall, near Ashford, in the county of Kent, for the invention of "An instrument for inserting photographic or other pictures into, or removing them from, between the 'mounts' of photographic albums or other flat spaces into which the fingers cannot be inserted."

998. To EDWARD HENRY CRADOCK MONCKTON, of 5, Thurloe Place, South Kensington, in the county of Middlesex, Esquire, for the invention of "Improvements in timekeepers."

1000. To BENJAMIN SHARPE, of Hanwell Park, in the county of Middlesex, for the invention of "Improvements in harrows and rakes."

1002. To EDWARD BARNARD SAMPSON, of Ham Mills, Stroud, in the county of Gloucester, for the invention of "Improvements in apparatus for supplying oil or other liquid to wool, as the same is fed into carding engines."

1004. And to JAMES WRIGHT, of 42, Bridge Street, Blackfriars, city of London, Civil Engineer, for the invention of "Improvements in joining together armour and other thick metal plates, beams, and girders."

On their several petitions, recorded in the Office of the Commissioners on the 8th day of April, 1862.

1006. To SAMUEL RODGETT, of Blackburn, in the county of Lancaster, Foreman, for the invention of "Certain improvements in power looms for weaving."

1008. To SQUIRE FARRON, of Ashton-under-Lyne, in the county of Lancaster, Watch Maker, for the invention of "Improvements in machinery or apparatus for regulating the supply of steam from the boiler to the cylinder or pipes of steam engines, which improvements are also applicable to gases or fluids."

1012. To WILLIAM DAVIES, of Llanelly, Carmarthenshire, South Wales, for the invention of "Improvements in puddling, balling, and re-heating furnaces."

1014. To JOHN LANGSTON, of North Street, Strood, in the county of Kent, for the invention of "Improvements in the manufacture of Portland cement."

1016. To JOHN KNOWELDEN, of Southwark, in the county of Surrey, Engineer, for the invention of "Improvements in steam, water, and other fluid engines."

1018. And to WILLIAM MAYS, of Joseph Street, Back Road, Shadwell, in the county of Middlesex, Miller, for the invention of "Improvements in machinery for grinding corn, grain, and other substances."

On their several petitions, recorded in the Office of the Commissioners on the 9th day of April, 1862.

1022. To WILLIAM ARMITAGE, of the city of Manchester, in the county of Lancaster, Manufacturer, for the invention of "Improvements in looms for weaving."

1024. To JOHN HOUGHTON, of No. 10, Foster Lane, Cheapside, in the city of London, for the invention of "An improved haversack."

1028. To GEORGE DIRS MERTENS, of 5, Royal Crescent, Margate, in the county of Kent, Gentleman, for the invention of "Improvements in the preparation of materials to be employed in the making of beer, and in the machinery or apparatus employed therein."—A communication to him from abroad by Charles Theodore Aulhorn, of Dippoldswalde, in the kingdom of Saxony.

1030. To HENRY DEACON, of Appleton House, Appleton, in the county of Lancaster, Alkali Manufacturer, for the invention of "Improvements in the manufacture of caustic soda."

1032. To JOHN PETRIE, junior, of Rochdale, in the county of Lancaster, Ironmonger, for the invention of "Improvements in machinery or apparatus for blowing and exhausting air."

1034. And to CHARLES BARTHOLOMEW, of Broxholme, Wheatley, near Doncaster, Civil Engineer, and JOHN HEPTINSTALL, of Masbrough, near Rotherham, both in the county of York, for the invention of "Improvements in making circular blooms, such as are used in the manufacture of tyres, and for other purposes."

On their several petitions, recorded in the Office of the Commissioners on the 10th day of April, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

NOTICE is hereby given, that the petition of

1065. FREDERICK TOLHAUSEN, Civil Engineer and Patent Agent, of No. 17, Rue du Faubourg Montmartre, Paris, in the empire of France, praying for Letters Patent for the invention of "A telegraphic dial printing apparatus,"—a communication from Jean Baptiste Rousse and Henry Vivès, two persons resident at No. 17, Rue du Faubourg Montmartre aforesaid,—was deposited and recorded in the Office of the Commissioners on the 14th day of April, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of LETTERS PATENT which passed the Great Seal on the

16th April, 1862.

2579. JOSEPH LISTER, Engineer, and DAVID MYERS, Builder, both of Caledonia Street, Bradford, in the county of York, for an invention of "Improvements in lifting or hoisting apparatus, whereby to ensure the safety of the cage or article lifted when a rope or chain breaks or is overwound, and in hoists generally, as applied to mills, warehouses, and other buildings."—Dated 16th October, 1861.

2795. JOHN RICHARDSON WIGHAM, of Cape Street, in the city of Dublin, Ireland, for an invention of "Improvements in apparatus for the manufacture of gas, parts of which are also applicable for cooking purposes."—Dated 7th November, 1861.

2583. WILLIAM THOMAS WESTON, of 4, Trafalgar Square (Patent Office), in the county of Middlesex, for an invention of "Improvements in screw-wrenches."—Dated 17th October, 1861.

2585. ROBERT SMITH, of 24, Higher Chatham Street, Chorlton-upon-Medlock, Machinist, and JOHN BARNOUIN ROWCLIFFE, of Ducie Works, Manchester, both of the county of Lancashire, for an invention of "Improvements in apparatus for winding yarn or threads on the pin-bobbins or spools used in small ware and ribbon looms."—Dated 17th October, 1861.

2590. ROBERT AYTOUN, of Edinburgh, in the county of Mid Lothian, North Britain, Writer to the Signet, for an invention of "Improvements in apparatus to be applied to chimneys or flues for improving the draught therein, and for preventing down draughts or the descent of smoke into apartments."—Dated 17th October, 1861.

2594. JOHN GOUCHER, of Worksop, in the county of Nottingham, Iron Founder, Engineer, and Machinist, for an invention of "Improvements in the beaters and drums used in thrashing machines."—Dated 18th October, 1861.

2595. EDWARD PEYTON, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in the frames of metal bedsteads."—Dated 18th October, 1861.

2601. PATRICK ROBERTSON, of Sun Court, Cornhill, in the city of London, for an invention of "Improvements in the manufacture of cartridges."—A communication to him from abroad by the inventors, Algernon Johnston, of the city of Middletown, in the state of Connecticut, and Lorenzo Dow, of the city of Topeka, in the state of Kansas, United States of America.—Dated 18th October, 1861.

2611. THOMAS FEARNLEY, of Arcadia Street, Manningham, near Bradford, in the county of York, Engineer, for an invention of "Improvements in steam hammers,"—Dated 19th October, 1861.

2620. HENRY LAMPLOUGH, of No. 113, Holborn Hill, in the county of Middlesex, Chemist, for an invention of "Improvements in the means for igniting the wicks of candles and lamp wicks."—Dated 21st October, 1861.

2621. COLIN MCDOUGALL, of the city of Manchester, in the county of Lancaster, Wholesale Warehouseman, for an invention of "Improvements in connecting and fastening the bands of covered steel or other materials used for crinolines."—Dated 21st October, 1861.

2628. FERRAR FENTON, of Fishguard, in the county of Pembroke, for an invention of "Improvements in obtaining and treating fibrous substances."—Dated 21st October, 1861.

2639. HENRY MAY, of the firm of Knight and May, Eagle Factory, Tewkesbury, in the county of Gloucester, Shoe Manufacturer, for an invention of "Improvements in goloshes." — Dated 22nd October, 1861.

2640. HOWARD BUSBY FOX, of Liverpool, in the county of Lancaster, for an invention of "Improvements applicable to iron and other metallic bedsteads."—Dated 22nd October, 1861.

2642. GEORGE ARCHER, of Raunds, in the county of Northampton, Shoemaker, for an invention of "Improvements in sewing boots and shoes."—Dated 23rd October, 1861.

2646. CLAUDE BRISON and ANTOINE CHAVANNE, both of Lyons, France, Gentlemen, for an invention of "Improvements in ovens, kilns, or furnaces for manufacturing or other purposes."—Dated 23rd October, 1861.

2674. EDOUARD ALEXANDRE, Organ Builder, of 2, Rue Sainte-Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention of "An improved pedal-box to be applied to flutinas or small organs, and other similar musical instruments."—Dated 25th October, 1861.

2678. HENRY GILSON, of the Maen-Offeren Slate Quarries, Festiniog, North Wales, for an invention of "Improvements in slate dressing machines for cutting and trimming the edges of slates."—Dated 25th October, 1861.

2683. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "Improved apparatus for ascertaining the presence and degree or cessation of vitality in the human body, and in animals of the higher class, applicable to the semeiosis of health, disease, and death."—A communication to him from Léon

Victor Collongues (M. D.), a person resident at No. 72, Grande Rue Passey-lez-Paris, in the empire France.— Dated 26th October, 1861.

2685. John Sidebottom, of Harewood, near Mottram, in the county of Chester, Cotton Spinnner and Manufacturer, for an invention of "Certain improvements in machinery for making partial tubes for the spindles of spinning and other machines."—Dated 26th October, 1861.

2727. James Lee Norton, of Belle Sauvage Yard, Ludgate Hill, in the city of London, for an invention of "Improvements in apparatus for raising water."—Partly of a communication from abroad made to him by William Aldon, of 28, Boulevart Bonne Nouvelle, Paris, in the empire of France, and partly of invention and discovery made by himself.—Dated 30th October, 1861.

2733. George Norman, of St. Matthias Place, Stoke Newington Green, in the county of Middlesex, Cabinet Manufacturer, for an invention f "Improvements in the mounting of cots or cradles."—Dated 31st October, 1861.

2771. John Ashley, of 13, Grosvenor Place, Bath, Doctor of Laws, for an invention of "Improvements in apparatus for attaching horses to carriages."—Dated 4th November, 1861.

2821. Edward Loysel, of Cannon Street, in the city of London, Civil Engineer, for an invention of "Improvements in match-boxes or cases."—Dated 9th November, 1861.

2912. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for cutting irregular and curvilinear forms in wood or other similar substances."—A communication to him from abroad by Robert Marcher. of New York, in the United States of America, Manufacturer of prepared Mouldings and Oval Frames.—Dated 20th November, 1861.

2959. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for preparing oval picture frames."—A communication to him from abroad by Robert Marcher, of New York, in the United States of America, Manufacturer of prepared Mouldings and Oval Frames.—Dated 25th November, 1861.

2965. Augustus William Willis, of 28, Great Russell Street, Bloomsbury, in the county of Middlesex, Pencil Manufacturer, for an invention of "Improvements in the construction of pencil cases or holders."—Dated 26th November, 1861.

3033. Watson Duchemin, of Charlottetown, Prince Edward's Island, for an invention of "Improvements in blocks for hoisting."—Dated 3rd December, 1861.

223. George Henry Morgan and Edward Morgan, both of Grand Junction Terrace, Edgware Road, in the county of Middlesex, for an invention of "Improvements in carriages."—Dated 28th January, 1862.

226. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in engines to be employed for pumping or forcing air or water, or for other purposes where a rectilinear motion is required."—A communication to him from abroad by Wellington Lee, of New York, in the United States of America, Engineer.—Dated 28th January, 1862.

231. François Delamare De Boutteville the younger, of Fontaine-le-Bourg, in the department of the Seine Inféricure, in the empire of France, for an invention of "Improvements in machinery applicable to the spinning of fibrous substances."—Dated 29th January, 1862.

233. John McKean, of Walmer Bridge Mills, near Preston, in the county palatine of Lancaster, Manufacturer, and James Gabbott of the same place, Manager, for an invention of "Improvements in sizeing or dressing yarns or textile materials."—Dated 29th January, 1862.

354. William Macnab, of Greenock, in the county of Renfrew, North Britain, Engineer, for an invention of "Improvements in steam engines."—Dated 11th February, 1862.

Patents which have become Void.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 50*l*., before the Expiration of the Third Year from the date of such Patents, pursuant to the Act of the 16 Vict. c. 5, sec. 2, for the week ending the 12th day of April, 1862.

860. Isaac Adams, of the state of Massachusetts, of the United States of America, for an invention of "An improved tubular chain cable guide for vessels' bulwarks."—A communication from Alfred S. Phillips, a resident of Boston, of the said state of Massachusetts.—Dated 6th April, 1859.

864. John Scoffern, of 4, Barnard's Inn, Bachelor of Medicine, for an invention of "Improvements in lubricating projectiles and cartridges."—Dated 6th April, 1859.

865. David Moseley, of the Chapel Field Works, Ardwick, in the city of Manchester, Manufacturer of India-rubber and Gutta-percha, for an invention of "Improvements in the manufacture of cards for carding cotton and other fibrous materials."—Dated 7th April, 1859.

867. Robert Postlethwaite, of Liverpool, in the county of Lancaster, Saddler, for an invention of "An improvement in harness pads for horses."—Dated 7th April, 1859.

871. John Garrett, of Arundel Place, Haymarket, in the county of Middlesex, Tinman, for an invention of "Improvements in the construction of goblets, jugs, and other like articles."—Dated 7th April, 1859.

875. John Bindley, of Birmingham, in the county of Warwick, Engineer, and Joseph Leicester Hinks, of Birmingham aforesaid, Manufacturer, for an invention of "Improvements in rotatory steam-engines and pumps, a portion of which improvements may also be applied to the bearings of shafts or axles and other rotating bodies."—Dated 8th April, 1859.

876. William Campion, of the town and county of the town of Nottingham, Machine Builder, of the firm of W. W. Campion, of the said town, Machine Builders, for an invention of "Improvements in machinery for the manufacture of looped fabrics."—Dated 8th April, 1859.

877. Mathew Wheeldon, of No. 174, Liverpool Road, Burslem, in the county of Stafford, Glass Cutter, for an invention of "An improvement in looking glasses and mirrors."—Dated 8th April, 1859.

878. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for an invention of "An improved articulated joint for water, gas, and steam pipes."—A communication from Victor Dore, a person resident in Paris, France.—Dated 8th April, 1859.

879. Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improvements in the treatment of mineral phosphates of lime."—A communication from B. de Siebenthal, a person residing in Paris. —Dated 8th April, 1859.

880. Nicolas Alexis Grumel, formerly a Dyer, and at present Ink Manufacturer, in Paris, in the empire of France, for an invention of "Improvements in dyeing cotton, wool, silk, flax, and other fibrous materials or fabrics."—Dated 8th April, 1859.

882. William Hooper, of Mitcham, in the county of Surrey, India-rubber Manufacturer, for an invention of "Improvements in reworking or remanufacturing compounds of india-rubber and sulphur."—Dated 8th April, 1859.

884. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in telegraphing and in telegraphic apparatus."—A communication from abroad by Mr. A. Wilson, of New York, in the United States of America.—Dated 8th April, 1859.

885. Elias Robison Handcock, of No. 23, Norfolk Street, Strand, in the county of Middlesex, Esquire, for an invention of "Improvements in steam and other motive-power engines."—Dated 8th April, 1859.

886. Thomas Spencer, of 192, Euston Road, Euston Square, London, Analytical and Consulting Chemist, for an invention of "Improvements in the economical treatment of refuse or waste matter containing sulphur." — Dated 9th April, 1859.

888. Thomas Barnett, of Oldham, in the county of Lancaster, Henry Turner Sourbuts, and William Loynd, of Hyde, in the county of Chester, Engineers, for an invention of "Improvements in steam-engines." — Dated 9th April, 1859.

891. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the manufacture or production of the ferro-cyanide and cyanide of potassium."—A communication from abroad by Jean Victor Lucas, of Paris, in the French Empire, Chemist.—Dated 9th April, 1859.

893. John Martin, of No. 4, Buckingham Street Islington, in the county of Middlesex, Manufacturer, for an invention of "Improvements in the materials used in the manufacture of bonnet fronts and ruches."—Dated 9th April, 1859.

895. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in steam engines and boilers."—A communication from abroad by Ernest Georges Xavier Boileau, of Paris, in the empire of France. —Dated 9th April, 1859.

896. Henry Francis Gardner, of Boston, in the United States of America, for an invention of "Improvements in machinery for blocking or crimping the uppers of boots and shoes, and in treeing boots."—Partly a communication from abroad by William Wilmot and Philander Shaw, of the United States of America.—Dated 9th April, 1859.

905. William Rowan, of the firm of John Rowan and Sons, of Belfast, in the county of Antrim, Engineers, for an invention of "Improvements in spinning flax, hemp, and other fibrous materials." —Dated 11th April, 1859.

906. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E. C., Patent Agent, for an invention of "Improvements in candle moulds."—A communication from Auguste Godchaux, residing at Paris.—Dated 11th April, 1859.

907. William Southern Clark, of Aberdare, in the county of Glamorgan, Mining Engineer, for an invention of "Improved means of loading ships or vessels with coal, and of separating or removing small coal therefrom."—Dated 11th April, 1859.

908. William Henry Barlow, of Great George Street, Westminster, for an invention of "Improvements in beams and girders."—Dated 11th April, 1859.

909. John Marland, of Southport, in the county of Lancaster, for an invention of "An improvement in the manufacture of cop tubes."—Dated 11th April, 1859."

910. William Clark, of Langhaugh, Galashiels, Scotland, a Lieutenant in Her Majesty's Navy, for an invention of "An improved safety block to be used for lowering ships' boats, the same being applicable to other like or analogous purposes."— Dated 12th April, 1859.

911. David Doig, of the city of Manchester, Engineer, for an invention of "Improvements in the construction of gas lamps."—A communication from abroad by William Gilbert Ginty, of Rio de Janeiro, in the empire of Brazil.—Dated 12th April, 1859.

912. Patrick Aitchison, Brass Founder, of Sheffield, in the county of York, for an invention of "Improvements in taps."—Dated 12th April, 1859.

916. Philip Hill, of Manchester, in the county of Lancaster, Weaver, and John Moore, of Salford, in the same county, Small Ware Manufacturer,

for an invention of "Improvements in weaving double pile fabrics."—Dated 12th April, 1859.

918. MATHIEU CASTAY, of Paris, in the empire of France, Clergyman, for an invention of "Improvements in metallic bridges."—Dated 12th April, 1859.

919. JAMES CROSSDALE, of Rotherfield Street, Lower Islington, in the county of Middlesex, Boot and Shoe Maker, for an invention of "Certain improvements in boots and shoes."—Dated 12th April, 1859.

A LIST of the LETTERS PATENT for INVENTIONS which have become VOID by reason of the Non-payment of the additional Stamp Duty of 100*l.*, before the Expiration of the Seventh Year from the date of such Patents, pursuant to the Act of the 16 Vict. c. 5, s. 2, for the week ending the 12th day of April, 1862.

768. ROBERT WILLIAM WAITHMAN, Esquire, of Bentham House, in the county of York, for an invention of "Improvements in machinery or apparatus for the manufacture of lint or similar substances."—Dated 7th April, 1855.

784. WILLIAM RICKETTS and THOMAS BULLEY, both of Stepney, in the county of Middlesex, Painters and Grainers, for an invention of "Improvements in producing ornamental designs on painted or japanned table covers."—Dated 10th April, 1855.

785. SAMUEL FIELDING the younger, of Green, in the township of Weirdle and Wardle, in the parish of Rochdale, in the county of Lancaster, for an invention of "Improvements in apparatus for oiling or lubricating the pistons of steam engines."—Dated 10th April, 1855.

786. PETER ARMAND le Comte de FONTAINEMOREAU, of the English and Foreign Patent Office for Inventions, 4, South Street, Finsbury, London, and 39, Rue de l'Echiquier, Paris, for an invention of "Certain improvements in the construction of steam-boilers."—A communication from Mons. S. Boutigny, of Paris, France.—Dated 10th April, 1855.

802. GEORGE FERGUSSON WILSON, CONRAD ABBEN HANSON, and JAMES JOHN WALLIS, all of Belmont, Vauxhall, for an invention of "Improvements in the manufacture of lamp candles, and in candle lamps for holding the same."—Dated 11th April, 1855.

811. ISAIAH VERNON, of West Bromwich, in the county of Stafford, Manufacturer, for an invention of "An improvement or improvements in the slide valves of steam engines."—Dated 12th April, 1855.

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247 -	A.D. 1853—January to March ,,
268 -	,, April to June ,,
291 -	,, July to September ,,
321 -	,, October to December ,,
345 -	A.D. 1854—January to March ,,
371 -	,, April to June ,,
399 -	,, July to September ,,
424 -	,, October to December ,,
451 -	A.D. 1855—January to March ,,
475 -	,, April to June ,,
505 -	,, July to September ,,
527 -	,, October to December ,,
553 -	A.D. 1856—January to March ,,
579 -	,, April to June ,,
605 -	,, July to September ,,
632 -	,, October to December ,,
660 -	A.D. 1857—January to March ,,
684 -	,, April to June ,,
712 -	,, July to September ,,
737 -	,, October to December ,,
761 -	A.D. 1858—January to March ,,
789 -	,, April to June ,,
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The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

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660 -	A.D. 1853—January to March ,,
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No. 866. TUESDAY, APRIL 22, 1862. Price 2d.

Applications for Letters Patent.

(*17th, 19th, and 21st April*, 1862.)

1115. Charles Denton Abel, of No. 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in the manufacture and production of the chromates and the bichromates of potash and of soda."—A communication to him from abroad by Louis Alexandre Taillandier, Chemist, of Argenteuil, in the empire of France.—Dated 17th April, 1862.

1116. Alfred Krupp, of Essen, in the kingdom of Prussia, Cast Steel Manufacturer, for an invention of "Certain improvements in the manufacture of screw propellers."—Dated 17th April, 1862.

1117. Victor Fleury, of No. 23, de la Paix, in the city of Paris, in the empire of France, Clockmaker, for an invention of "Improvements in clocks and other time keepers."—Dated 17th April, 1862.

1118. William Hodgson Hutchinson, of Bury, in the county of Lancaster, Starch Manufacturer, for an invention of "Improvements in the manufacture of ammonia or its salts and cyanogen or its compounds from refuse gluten."—Dated 17th April, 1862.

1119. John Griffiths, of Liverpool, in the county of Lancaster, Civil Engineer, for an invention of "Improvements in propelling ships and other navigable vessels."—Dated 17th April, 1862.

1120. William Harling, John Matthew Todd, and Thomas Harling, all of Burnley, in the county of Lancaster, Machine Makers, for an invention of "Improvements in looms for weaving."—Dated 17th April, 1862.

1121. Frederick Tolhausen, Patent Agent, 17, Faubourg Montmartre, Paris, in the empire of France, for an invention of "An improved machine for making bricks, tiles, and the like articles."—A communication from Victor Duprat, a person resident at Canéjan, in the department de la Gironde, France.—Dated 17th April, 1862.

1122. James Murphy, senior, of Glasgow, in the county of Lanark, North Britain, Pattern Designer, for an invention of "Improvements in looms."—Dated 17th April, 1862.

1123. John Pugh Temperley, of the Soho Iron Works, Bolton-le-Moors, in the county of Lancaster, Engineer, for an invention of "Improvements in the air pumps of steam engines."—Dated 17th April, 1862.

1124. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in sewing machines."—A communication to him from abroad by William Grover, of the Grover and Baker Sewing Machine Company, a person resident at Boston, state of Massachusetts, United States of America.—Complete specification.—Dated 17th April, 1862.

1125. Jean Louis Perin, Engineer, residing No. 97 Rue du Faubourg St. Antoine, Paris, for an invention of "Improvements in machinery for mortising wood."—Dated 17th April, 1862.

1126. Henry Gardner, of Leeds, in the county of York, Manufacturer, for an invention of "Improvements in machinery for breaking and preparing flax and other fibrous substances."—Dated 17th April, 1862.

1127. Charles Denton Abel, of No. 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, for an invention of "Improvements in the manufacture and production of certain alloys containing cadmium."—A communication to him from abroad by Henri Catherine Camille de Ruolz and Anselme Louis Marie Fontenay, both residing at Paris, in the empire of France.—Dated 17th April, 1862.

1128. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent,

for an invention of "Improvements in taps and valves."—A communication to him from abroad by Jean Antoine Clement, Antoine Crozy, and André Morateur, of 23, Boulevard de Strasbourg, Paris, France.—Dated 17th April, 1862.

1129. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in buffing apparatuses and in draw-springs."—A communication to him from abroad by Richard Dover Chatterton, of Coburg, Canada West.—Dated 17th April, 1862.

1130. William Anderson, of 85, Shaftesbury Street, in the county of Middlesex, Engineer, for an invention of "Improvements in tubular steam generators."—Dated 17th April, 1862.

1131. Henry Gallagher, of Bermondsey, in the county of Surrey, Manufacturer, for an invention of "Improvements in overalls, leggings, or in overboots, which he intends to name 'Gallagher's Patent Ecreece.'"—Dated 17th April, 1862.

1132. Samuel Rideal, Railway Carriage Builder and Engineer, of Manchester, and Robert Shepherd, Gentleman, of Great Grimsby, Lincolnshire, for an invention of "Improvements in railway break apparatus."—Dated 17th April, 1862.

1133. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the manufacture of railway rails."—A communication to him from abroad by Jean Baptiste Delrieu, of 29, Boulevart St. Martin, Paris, Metallurgist.—Dated 17th April, 1862.

1134. Joseph Cedric Rivett, of Prestolee New Mills, Farnworth, in the county of Lancaster, Cotton Spinner, and John Muir Hetherington, of Manchester, in the said county, Machine Maker, for an invention of "Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning."—Dated 17th April, 1862.

1135. Ralph Wedgwood, of Barnes, in the county of Surrey, Gentleman, for an invention of "Improved apparatus for facilitating the saving of life in cases of fire."—Dated 17th April, 1862.

1136. Robert Dennison, of Lancaster, in the county of Lancaster, Joiner, for an invention of "Improvements in reaping and mowing machines."—Dated 19th April, 1862.

1137. Edwin Dove, of Hunter Street, in the county of Middlesex, Gentleman, for an invention of "Improvements in matches and fuzees, and apparatus for containing and igniting the same."—Dated 19th April, 1862.

1138. Joseph Scott Phillips, Major H.M.'s I.R. List, of No. 10, College Crescent, Finchley Road, in the county of Middlesex, for an invention of "A new method and apparatus for the propulsion of vessels through the water."—Dated 19th April, 1862.

1139. John Shanks, of Barrhead, in the county of Renfrew, North Britain, Plumber, for an invention of "Improvements in apparatus for promoting ventilation, also applicable to drying stoves."—Dated 19th April, 1862.

1140. Moses Masters, of New Kent Road, in the county of Surrey, Artificial Hand and Leg Manufacturer, for an invention of "Improvements in artificial legs."—Dated 19th April, 1862.

1141. Richard Stuart and Graham Stuart, Spindle and Flyer Manufacturers, and Henry Hill, Bookkeeper, all of Sheffield, in the county of York, for an invention of "Improvements in fastening flyers upon spindles."—Dated 19th April, 1862.

1142. Benjamin Rhodes, of Old Ford Road, Bow, in the county of Middlesex, for an invention of "Improvements in the machinery for and in the method of making, as also in the materials to be employed in the manufacture of cylinders, tubes, and other vessels from paper and other materials or fabrics."—Dated 19th April, 1862.

1143. Walter Munn, of Borrowstounness, in the county of Linlithgow, North Britain, Engineer, and David Ballantine, junior, of the same place, Ironfounder, for an invention of "Improvements in mills for grinding."—Dated 19th April, 1862.

1144. Benjamin Browne, of No. 52, King William Street, in the city of London, Civil Engineer and Patent Agent, for an invention of "Improvements in breech-loading fire-arms."—A communication to him from abroad by Felix Célestin Palis, of 15, Place de la Bourse, Paris, in the French empire, Directeur du Bureau de Traduction."—Dated 19th April, 1862.

1145. Edward Loysel, of Cannon Street, in the city of London, Civil Engineer, for an invention of "Improvements in locks and fastenings."—Dated 19th April, 1862.

1146. William Rose, of Hales Owen, in the county of Worcester, Manufacturer, for an invention of "Improvements in the manufacture of tubes, more especially applicable to the barrels of fire-arms and ordnance."—Dated 19th April, 1862.

1147. Alexander Parkes, of Liverpool Street, Birmingham, in the county of Warwick, for an invention of "Improvements in the manufacture of rollers for surface printing and embossing."—Dated 19th April, 1862.

1148. Alfred Nicholson Wornum, of Store Street, in the county of Middlesex, for an invention of "Improvements in pianofortes."—Dated 19th April, 1862.

1149. Alexander Parkes, of Liverpool Street, Birmingham, in the county of Warwick, for an invention of "Improvements in surface condensers."—Dated 19th April, 1862.

1150. Henry Lumley, of Chancery Lane, in the county of Middlesex, Auctioneer, for an invention of "An improved rudder."—Dated 19th April, 1862.

1151. Alfred Pierre Tronchon, of 2, Rue Sainte Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention of "An improved construction of houses, murals, mobil palisads, fruit walls, and other analagous objects."—Dated 21st April, 1862.

1152. James Combe, of Belfast, for an invention of "Improvements in machinery for hackling flax and other fibrous substances."—Dated 21st April, 1862.

1153. Edward Henry Cradock Monckton, of No. 5, Thurloe Place, South Kensington, in the county of Middlesex, Esquire, for an invention of "Improved apparatus to be used in warfare, parts of which are applicable to other useful purposes."—Dated 21st April, 1862.

1154. John Pickard, Engineer, and Thomas Morris, Broker, both of Preston, in the county of Lancaster, for an invention of "Improvements in furnaces for the prevention or consumption of smoke."—Dated 21st April, 1862.

1155. Samuel Parkes Matthews, of Wolverhampton, in the county of Stafford, for an invention of "Improvements in vices."—Dated 21st April, 1862.

1156. Sandiforth Featherstone Griffin, of New Adelphi Chambers, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the construction of vessels of war and batteries on land."—Dated 21st April, 1862.

1157. Abraham Marks, of Cannon Street Road, in the county of Middlesex, for an invention of "Improvements in artificial feathers, applicable to certain ornaments of dress."—Dated 21st April, 1862.

1158. Edwin Francis Clarke, of Waterloo, near Liverpool, in the county of Lancaster, Gentleman, for an invention of "Improvements in propellers for steam ships and other vessels."—Dated 21st April, 1862.

1159. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in packets or protectors for covering metal and other surfaces to prevent loss of heat by radiation."—A communication to him from abroad by Charles Louis Ruquois, residing at Marseilles, France.—Dated 21st April, 1862.

1160. Frederick Tolhausen, C.E. and Patent Agent, of 17, Faubourg Montmartre, Paris, France, but now residing at No. 100, Fleet Street, London, for an invention of "An improvement in horse-shoes."—A communication to him from abroad by Paul-Eugène Clément, Esq., a person resident at St. Amand (Marne), France.—Dated 21st April, 1862.

1161. Thomas Attwood, of Lewes, in the county of Sussex, Ironmonger, for an invention of "Improvements in kitcheners."—Dated 21st April, 1862.

1162. Charles Callebaut, of 2, Rue Sainte-Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention of "Some improvements in sewing machines."—Dated 21st April, 1862.

1163. Adam Dixon, of Birmingham, in the county of Warwick, Engineer, for an invention of "Improvements in knife and fork cleaning machines."—Dated 21st April, 1862.

1164. James Chapman Amos, of the firm of Easton Amos and Sons, of the Grove, Southwark, in the county of Surrey, Engineer, for an invention of "An improved mode of and improvements in apparatus for supplying surface condensers with water, part of which improvements is applicable to blowers and rotary pumps generally.—Dated 21st April, 1862.

1165. Christopher Crabb Creeke, of Bournemouth, in the county of Hants, Architect and Surveyor, for an invention of "Improvements in the construction of drain and other pipes."—Dated 21st April, 1862.

Notices to Proceed.

Notice is hereby given, that

3968. George Clark, of No. 30, Craven Street, Strand, London, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in the use, application, and manufacture of iron or steel as armour for ships or batterics."

As set forth in his petition, recorded in the said office on the 7th day of December, 1861.

3110. And John Leeming, of North Holme Mill, Bradford, in the county of York, Machine Maker, has given the like notice in respect of the invention of "Improvements in looms for weaving."

As set forth in his petition, recorded in the said office on the 11th day of December, 1861.

3111. Richard Searle, of Woodford Wells, in the county of Essex, Gentleman, has given the like notice in respect of the invention of "Improvements in the treatment, preparation, and combination of metals used for sheathing ships and marine erections, also for roofing buildings and other purposes."

3113. And William Lightfoot, of Harwell, in the county of Berkshire, Surgeon, has given the like notice in respect of the invention of "An improved bridle."

3119. And John William Scott, of the city of Worcester, Button Manufacturer, has given the like notice in respect of the invention of "Improvements in wads for fire-arms."

As set forth in their respective petitions, all recorded in the said office on the 12th day of December, 1861.

3123. And Stephen Barber Hewett, of Railway Cottage, Fairfield Road, Bow, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in the construction of boilers or generators for steam engines and other uses, applicable also to evaporators, and in pumps used therewith or otherwise used, some of which improvements in pumps are applicable to pistons and piston rods generally."

3126. And Henry John Olding, of Smith Square, Westminster, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in the mode of, and apparatus for, feeding steam boilers, also in apparatus for supplying fluids for other purposes, and in apparatus for raising fluids."

3131. And Thomas Bow Gibson, of the city of Glasgow, Manufacturer, has given the like notice in respect of the invention of "A new or improved method of ornamenting certain fabrics."

3133. And Pierre Quantin, of Bouscat, near Bordeaux, in the empire of France, has given the like notice in respect of the invention of "Manufacturing moulded earthen or stoneware cross sleepers, for superseding wooden ones, in the construction of railways."

3136. And John Hetherington, of Manchester, in the county of Lancaster, Machine Maker, Thomas Webb, of Smallwood Manor, Uttoxeter, in the county of Stafford, Esquire, and James Craig, of Tutbury, in the county of Stafford, Cotton Spinner, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for spinning and doubling cotton and other fibrous materials."

3140. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in, and apparatus for, the production and application of motive power in locomotive and other steam engines."—A communication to him from abroad by Felix Alexandre Testud de Beauregard, of Paris, France.

3141. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in blowers, or apparatuses for superheating steam and other gases, and for projecting them, combined with atmospheric air upon ignited combustible matter."—A communication to him from abroad by Felix Alexander Testud de Beauregard, of Paris, France.

As set forth in their respective petitions, all recorded in the said office on the 13*th day of December*, 1861.

3151. And John Willis, junior, of Newcastle-on-Tyne, in the county of Northumberland, Miller, has given the like notice in respect of the invention of "Improvements in the preparation of materials applicable to the manufacture of paper."

3152. And George Prince Vallas, of No. 2, Kentish Town Road, Camden Town, in the county of Middlesex, Zinc Worker, has given the like notice in respect of the invention of "Improvements upon, or additions to, certain description of portable baths, with the object of rendering them available for use as trunks or boxes."

3156. And John Aitken, of Lasswade, near Edinburgh, has given the like notice in respect of the invention of "Improvements in supplying water to water wheels."

3157. And William George Laws, of the borough of Tynemouth, Civil Engineer, has given the like notice in respect of the invention of "Improvements in railway point signals."

As set forth in their respective petitions, all recorded in the said office on the 16*th day of December*, 1861.

3167. And Samuel Sheppard, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "A new or improved tap or stopcock."

3178. And James Bannehr, of High Street, Exeter, has given the like notice in respect of the invention of "Improvements in apparatus for desiccating grain, seeds, and other articles."

As set forth in their respective petitions, both recorded in the said office on the 18*th day of December*, 1861.

3180. And William Betts, of Wharf Road, City Road, in the county of Middlesex, Patent Capsule Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of coverings for the ends of cigars."

3185. And Alphonse Treuille, Doctor, Physician, and François Xavier Traxler, Civil Engineer, both of 29, Boulevart St. Martin, Paris, in the empire of France, and of 53, Chancery Lane, London, have given the like notice in respect of the invention of "Improvements in the manufacture of paper and card paper or cardboard, with the object of preventing forgery and alterations in cheques and other documents, and which improvements are also applicable to the manufacture of playing cards and railway and other tickets."—A communication to them by Mr. Joseph Prosper Olier, Sub-director of the General Stamp Works, of Paris, a person resident at 13, Rue le Banque, Paris.

As set forth in their respective petitions, both recorded in the said office on the 19*th day of December*, 1861.

3203. And Dudley Charles Le Souëf, of Twickenham, in the county of Middlesex, England, has given the like notice in respect of the invention of "An improvement in cylinders used in printing calicoes and other textile fabrics."—A communication to him from abroad by Henry Kündig, George Bertsclay, and Joseph Porges de Portheim, of Prague, in Austria,

As set forth in his petition, recorded in the said office on the 20*th day of December*, 1861.

3205. And Timothy Morris and Robert Weare, both of Birmingham, in the county of Warwick, Electricians, and Edward Henry Cradock Moncton, of Fineshade, in the county of Northampton, Esquire, have given the like notice in respect of the invention of "Improvements in

submarine and other telegraphic communication, and in apparatus connected therewith."

3206. And WILLIAM BENNETTS, of Tucking Mill, Camborne, in the county of Cornwall, Engineer, has given the like notice in respect of the invention of "Improvements in the mechanism required for and in the manufacture and composition of gunpowder."

As set forth in their respective petitions, both recorded in the said office on the 21st day of December, 1861.

3214. And JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, has given the like notice in respect of the invention of "Improvements in apparatus for cleaning wheat and other grain."—A communication to him from abroad by Jean Pierre Fili, of Paris, in the empire of France, Machinist.

As set forth in his petition, recorded in the said office on the 24th day of December, 1861.

3267. And WILLIAM SPENCE, of 50, Chancery Lane, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improvements in deflectors for lamps."—A communication to him from abroad by Lemuel Beers, of Newtown, Fairfield, in the county and state of Connecticut, United States of America.

3274. And EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, has given the like notice in respect of the invention of "Improvements in saddles."—A communication to him from abroad by John Bloodgood Peck, of Yonkers, in the county of Westchester and state of New York, and Thomas Bloodgood Peck, of New York, United States of America.

As set forth in their respective petitions, both recorded in the said office on the 31st day of December, 1861.

4. And THOMAS HALL, of Odiham Wharf, Odiham, in the county of Hants, has given the like notice in respect of the invention of "An improved apparatus for removing weeds from canals, rivers, and lakes, after such weeds have been cut with a chain scythe or other machine, or implement applicable to that purpose."

17. And JOHN JACOB, of Gutknecht, of Neuhof, near Tizers, Switzerland, Engineer, has given the like notice in respect of the invention of "Improvements in meters for measuring gas, water, and other fluids."

As set forth in their respective petitions, both recorded in the said office on the 1st day of January, 1862.

70. And ALPHONSE RENÉ LE MIRE DE NORMANDY, of Odin Lodge, King's Road, Clapham Park, Surrey, Analytical Chemist, has given the like notice in respect of the invention of "An improved method of fixing tubes in tube plates."

As set forth in his petition, recorded in the said office on the 10th day of January, 1862.

158. And ALFRED JOSEPH MARTIN, of High Street, Bow, in the county of Middlesex, Chemist and Druggist, has given the like notice in respect of the invention of "Improvements in the treatment of fusel oil, and for various applications of the same to useful purposes."

As set forth in his petition, recorded in the said office on the 21st day of January, 1862.

742. And WILLIAM GOSSAGE, of Widnes, in the county of Lancaster, Chemist, has given the like notice in respect of the invention of "Improvements in the manufacture of soda and potash."

As set forth in his petition, recorded in the said office on the 17th day of March, 1862.

794. And THOMAS MARSH, of West Bromwich, in the county of Stafford, Hame Manufacturer, has given the like notice in respect of the invention of "An improvement or improvements in hames for horses and other draught animals."

As set forth in his petition, recorded in the said office on the 22nd day of March, 1862.

869. And EDMUND SMITH, of Hamburg, Gas Meter Manufacturer, has given the like notice in respect of the invention of "Improvements in wet gas meters."

As set forth in his petition, recorded in the said office on the 28th day of March, 1862.

903. And HENRY POOLEY, junior, of the firm of Henry Pooley and Son, of Liverpool, Engineer, has given the like notice in respect of the invention of "Improvements in the construction of weighing machines and weigh bridges."

As set forth in his petition, recorded in the said office on the 31st day of March, 1862.

933. And JOHN THOMAS LOFT, of Brooklyn, New York, United States of America, but now residing at Berwick Street, Pimlico, in the county of Middlesex, Architect, has given the like notice in respect of the invention of "Improved machinery for printing in colours."

As set forth in his petition, recorded in the said office on the 2nd day of April, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

LIST of LETTERS PATENT which passed the Great Seal on the

22nd April, 1862.

2656. ISAC LOUIS PULVERMACHER, of Oxford Street, in the county of Middlesex, Electrician, for an invention of "Improvements in apparatuses for the production of galvanic and magneto-electric currents, and in machinery employed in making some of the apparatuses."—Dated 23rd October, 1861.

2657. WILLIAM BARRY LORD, of the Royal Artillery, Veterinary Surgeon and First Lieutenant, now residing at Plymouth, in the county of Devon,

for an invention of "An improved plug and socket or apparatus for closing and opening passages for the flow of liquids and fluids."—Dated 23rd October, 1861.

2660. Alexander Francis Campbell, of Great Plumstead, in the county of Norfolk, Gentleman, for an invention of "Improvements in railways."—Dated 24th October, 1861.

2661. Timothy Morris, Robert Weare, and Edward Henry Cradock Monckton, all of 4, Trafalgar Square (Patent Office), in the County of Middlesex, for an invention of "Improvements in magnets, induction coils, and in insulating wire and metal for electric and other purposes."—Dated 24th October, 1861.

2663. William Dicks, of Floore, in the county of Northampton, Smith, for an invention of "Improvements in water meters."—Dated 24th October, 1861.

2666. Robert Andrew Boyd, of Southwark, in the county of Surrey, Merchant, for an invention of "An improved furnace or fire-place, especially adapted to the singeing of pigs."—Dated 24th October, 1861.

2668. William Wharton, of Birmingham, in the county of Warwick, Engineer, for an invention of "Improvements in the manufacture or construction of springs for railway or other vehicles."—Dated 25th October, 1861.

2671. Edward Green, and Edward Green the younger, both of Wakefield, in the county of York, Engineers, for an invention of "Improvements in apparatuses for generating, superheating, and condensing steam."—Dated 25th October, 1861.

2675. Thomas Moore, of No. 33, Regent Circus, Piccadilly, in the county of Middlesex, for an invention of "Improvements in windlasses, and in checking or stopping chains worked thereby."—Dated 25th October, 1861.

2694. William Smith, of Leek, in the county of Stafford, Gentleman, for an invention of "Improvements in the preservation of stone, brick, and other such materials used in building, applicable also to the waterproofing of walls."—Dated 26th October, 1861.

2698. William Ryder, of Bolton-le-Moors, in the county of Lancaster, Roller and Spindle Maker, and Thomas Ryder, of the same place, Foreman, for an invention of "Improvements in machinery for fluting rollers."—Dated 28th October, 1861.

2710. Richard Gibbon, of the Royal Brewery, Brentford, in the county of Middlesex, Brewer, for an invention of "Improvements in machinery or apparatus for preparing grain for brewers."—29th October, 1861.

2736. Lynall Thomas, of No. 9, Union Street, Berkeley Square, in the county of Middlesex, Gentleman, for an invention of "Improvements in rifled ordnance and projectiles."—Dated 1st November, 1861.

2749. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in steam engines and boilers."—A communication to him from abroad by Henry Giffard, of 33, Boulevart Saint Martin, Paris, France.—Dated 1st November, 1861.

2760. Thomas Lockie, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in the manufacture of wrought-iron wheels."—Dated 2nd November, 1861.

2762. Samuel William Worssam, of King's Road, Chelsea, in the county of Middlesex, Engineer, for an invention of "Improvements in machinery for cutting wood."—Dated 2nd November, 1861.

2808. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the treatment of carpets."—A communication to him from abroad by Jean Armand Edmond Polonceau, of Paris, in the empire of France.—Dated 8th November, 1861.

2914. Frederick Johnson, of 12, North Street, in the city of Westminster, Civil Engineer, for an invention of "Improvements in ground or earth screws."—Dated 20th November, 1861.

3012. Robert Crawford Perry, of Manchester, in the county of Lancaster, Engraver, for an invention of "An improved infants' feeding bottle."—Dated 29th November, 1861.

162. William Tozer, of Gracechurch Street, in the city of London, and Archibald Read, of Walworth, in the county of Surrey, for an invention of "Improvements in boots and shoes."—Dated 21st January, 1862.

196. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the prevention or removal of incrustation in or from steam generators, and in the apparatus employed therein."—A communication to him from abroad by Stanislas Michel Lecacheux and Bernard Sartre, both of Marseilles, in the empire of France.—Dated 25th January, 1862.

381. Alfred Charles Ebbutt, Upholsterer, of 25, Blackman Street, Borough of Southwark, and 20, 33, and 34, High Street, Croydon, in the county of Surrey, for an invention of "Improvements in reclining, easy, and other chairs."—Dated 13th February, 1862.

590. William Tongue, of Bradford, in the county of York, Engineer, for an invention of "Improvements in machinery for breaking, rubbing, and scutching flax, hemp, or other vegetable fibrous materials, and in processes for treating silk waste."—Dated 4th March, 1862.

596. William Tongue, of Bradford, in the county of York, Engineer, for an invention of "Improvements in machinery for preparing silk, flax, hemp, or other fibrous materials."—Dated 5th March, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 19th April, 1862, inclusive.*)

14th April.

943. Alexander McDougall, of Manchester, in the county of Lancaster, Chemist, for an invention of "Improvements in coating metallic surfaces."—Dated 14th April, 1859.

15th April.

949. George Ashcroft, of Cardiff, in the county of Glamorgan, Engineer, for an invention of "Improvements in working presses and other hydraulic machines."—Dated 15th April, 1859.

1002. James Napier, Gentleman, Patrick, near Glasgow, in the county of Lanark, Scotland, for an invention of "Improvements in producing figures or representations upon glass."—Dated 21st April, 1859.

16th April, 1859.

924. William Arena Martin, and James Purdie, of Woolwich, in the county of Kent, Engineers, for an invention of "Improvements in fire-bars."—Dated 13th April, 1859.

972. Joseph Seaman, of Linslade, in the county of Buckingham, Engineer, for an invention of "Improvements in agricultural implements for working or cultivating the soil."—Dated 18th April, 1859.

977. John Freer, of Rothley, in the county of Leicester, Agricultural Implement Maker, for an invention of "Improvements in machines for planting grain and seed, and an improved seed feeder and meter for planting machines."—Dated 18th April, 1859.

1033. Thomas Aldridge Weston, of King's Norton, in the county of Worcester, Accountant, for an invention of "A new or improved pulley."—Dated 25th April, 1859.

1046. Robert Main, of Birkenhead, in the county of Chester, Carriage Builder, for an invention of "Improvements in wheels for carriages."—Dated 26th April, 1859.

17th April.

1008. Edward Clark, of New York, in the United States of America, but now of Morley's Hotel, in the city of Westminster, Gentleman, for an invention of "Improvements in sewing-machinery."—A communication from abroad by Isaac Merrit Singer, of New York aforesaid.—Dated 21st April, 1859.

1010. Thomas Seaville Truss, of Darlington, in the county of Durham, Civil Engineer, for an invention of "Improvements in the construction of pipes, and in the mode of joining the same."—Dated 21st April, 1859.

1037. Edward Humphrys, of Deptford, for an invention of "Improvements in steering-apparatus."—Dated 25th April, 1859.

1060. James Holroyd, of Leeds, in the county of York, Cloth Finisher, for an invention of "Improvements in machinery used for finishing woollen and other cloths."—Dated 27th April, 1859.

19th April.

1031. George Ward, of Blackburn, in the county of Lancaster, Gold Patent Thread Manufacturer, for an invention of "Improvements in machinery or apparatus for making healds."—Dated 25th April, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 19th April, 1862, inclusive.*)

16th April.

903. Joseph Whitworth, of the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in ordnance, fire-arms, projectiles, and machinery for the manufacture thereof."—Dated 23rd April, 1855.

17th April.

886. Richard Bright, of Bruton Street, in the city of Westminster, Lamp Manufacturer, for an invention of "Improvements in lamps and in lamp wicks."—Dated 20th April, 1855.

19th April.

880. Hypolite Macé, of Paris, in the empire of France, Merchant, for an invention of "Improvements in transferring colours or metals in design on and from paper and stone, on to surfaces."—A communication to him from L. A. C. Macé, of Paris.—Dated 20th April, 1855.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s.*

EXTENSION OF PATENTS TO THE COLONIES. Abstract of Replies to the Secretary of State's Circular Despatch of January 2, 1853, on the subject of the Extension of Patents for Inventions to the Colonies. Second Edition, with revised Table, 1861. Price 2*s.*

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

FOREIGN PATENTS.

BELGIUM.*

List of Patents of Invention Delivered on the 15th April, 1862.†

(*Communicated by the Belgian Government.*)

(For previous List, see No. 860 of this Journal.)

12,357. J, Husser, sen. and jun., represented by Mr. Trithart, of Trois Fontaines-Vilvorde, for an imported invention of "A mode of obtaining impressions on rollers."—Dated 25th March, 1862.—(French Patent, 20th February, 1862.)

12,358. A. Couvreux, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "A system of journals with clasps."—Dated 25th March, 1862.—(Original Patent, 21st January, 1862.)

12,369. A. L. Arnould, of Brussels, for "A mode of towing boats on rivers and canals by means of iron steam-boats."—Dated 25th March, 1862.

12,360. C. Niellon, of Brussels, for "Artificial stone called 'Artificial basalt.'"—Dated 25th March, 1862.

12,361. J. De Bièvre, represented by X. Raclot, of Brussels, for "Stays with elastic breast supports."—Dated 25th March, 1862.

12,362. J. Nasmyth, represented by T. Nasmyth, of Brussels, for an imported invention of "Improvements in obtaining motive power."—Dated 26th March, 1862.—(French Patent, 10th January, 1862.)

12,363. F. J. F. Laumonier, represented by L. Anoul, of Ixelles, a Patent of Improvement for "Coke-kilns."—Dated 26th March, 1862.—Original Patent, 25th February, 1861.)

12,364. C. A. Le Marquière, represented by D. De Vos-Verraert, of Brussels, for an imported invention of "A freezing apparatus."—Dated 26th March, 1862.—(French Patent, 17th March, 1862.)

12,365. P. F. Kriel, of Laeken-Molenbeek St. Jean, for 'So-called Macadam pavements.'"—Dated 26th March, 1862.

12,366. H. Haine, of Liége, for "A mode of varnishing zinc crucibles, gas retorts, and refractory products in general."—Dated 19th March, 1862.

12,367. V. F. Deprez, of Liége, for "Breech-loading rifles."—Dated 22nd March, 1862.

12,368. J. A. Fanshawe and J. A. Jaques, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in steam generators."—Dated 27th March, 1862.—(English Patent, 31st October, 1861.)

12,369. A. H. Lepoint, represented by H. Lepoint, of Brussels, for an imported invention of "Horses' collars of flat leather."—Dated 27th March, 1862.—(French Patent, 3rd February, 1859.)

12,370. A E. Delatour, jun., of Mons, for "A distilling apparatus."—Dated 28th March, 1862.

12,371. V. Gorinflot, of Damprémy-Charleroi, for "A glass block for blowing window-glass."—Dated 29th March, 1862.

12,372. F. A. Kieffer, represented by O. Daillencourt, of Brussels, for an imported invention of "Electric safety apparatus for mines and indicators of the rising of water."—Dated 28th March, 1862.—(French Patent, 25th January, 1862.)

12,373. C. G. F. De Douhet, represented by O. Daillencourt, of Brussels, for an imported invention of "Processes applicable to optics and lighting."—Dated 28th March, 1862.—(French Patent, 22nd July, 1861.)

12,374. E. T. Noualhier, represented by X. Raclot, of Brussels, for "A ventilating or suction apparatus."—Dated 28th March, 1862.)

12,375. A. J. Malteau, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in machines for cleaning cards."—Dated 29th March, 1862.—(French Patent, 11th September, 1861.)

12,376. H. Biebuyck, of Brussels, for an imported invention of "Improvements in storing and preserving grains."—Dated 29th March, 1862.—(French Patent, 22nd March, 1862.)

12,378. E. Fauche and C. A. Ravaut, represented by A. Calvet, of Brussels, for an imported invention of "Fastening jewelry articles.'—Dated 31st March, 1862.—(French Patent, 5th February, 1862.)

12,379. W. Bouler, represented by A. Calvet, of Brussels, for an imported invention of "Improvements in sizing or dressing threads of warps, applicable to gumming tissues."—Dated 31st March, 1862.—(English Patent, 20th January, 1862.)

12,380. J. Fouquet, represented by A. Calvet, of Brussels, for an imported invention of "An apparatus for threading needles."—Dated 31st March, 1862.—(French Patent, 5th September, 1861.)

12,381. F. Dekindre, represented by A. Calvet, of Brussels, a Patent of Improvement for "An apparatus for washing felt on paper machines whilst at work."—Dated 31st March, 1862.—(Original Patent, 18th February, 1862.)

12,382. A. Brisaer, of Brussels, for "A machine for perforating wood, iron, and other substances."—Dated 31st March, 1862.

12,383. J. Ridremont, of Vieux-Virton-Virton, for "An apparatus for preserving beverages in tapped casks without waste."—Dated 31st March, 1862.

12,384. The John Cockerill Company, represented by A. Joassart, of Seraing, a Patent of Improvement for "A rolling mill with hydraulic

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

pressure applicable to the manufacture of wheel-tyres."—Dated 28th March, 1862.—(Ph. Burlet's Original Patent, 31st October, 1857.)

12,385. The John Cockerill Company, represented by A. Joassart, of Seraing, a Patent of Improvement for "An apparatus for punching metal hoops."—Dated 28th March, 1862.

12,386. J. H. Redouté and P. H. J. Massera, of Herstal-Liége, for "Sights without springs for fire-arms."—Dated 31st March, 1862.

12,387. Ad. Vandevivere, of Brussels, for "An hydro-motive apparatus."—Dated 1st April, 1862.

12,388. C. J. Waldschmidt, of Brussels, for "An elastic mattress."—Dated 1st April, 1862.

12,389. S. N. De la Haye de Barbizières, represented by H. Biebuyck, of Brussels, for an imported invention of "Horse-shoes for the ice."—Dated 1st April, 1862.—(French Patent, 25th March, 1861.)

12,390. A. Couvreux and L. Combe, represented by H. Biebuyck, of Brussels, for an imported invention of "An excavating and conveying apparatus for earth-works."—Dated 1st April, 1862.—(French Patent, 5th May, 1860.)

12,391. H. Potez, represented by R. S. Kirkpatrick, of Ixelles, a Patent of Improvement for "A chemical product for preventing incrustations of steam-boilers."—Dated 2nd April, 1862.—(Original Patent, 29th April, 1857.)

12,392. J. D. Schneiter, represented by J. De Vos, of Molenbeek St. Jean, for an imported invention of "Composing type for cards, plans, &c."—Dated 2nd April, 1862.—(French Patent, 27th February, 1862.)

12,393. P. Vitron, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in supports with moveable collars for cylinders or rollers of machines for spinning, twisting, &c."—Dated 2nd April, 1862.—(French Patent, 19th December, 1861.)

12,394. E. Recordon, represented by H. Biebuyck, of Brussels, for an imported invention of "A kind of memorandum books, pocket books, or ledgers."—Dated 2nd April, 1862.—(French Patent, 11th February, 1860.)

12,395. W. T. Henley, represented by H. Biebuyck, of Brussels, for "Improvements in the construction of electric and magnetic telegraphs."—Dated 2nd April, 1862.

12,396. P. N. Legris, represented by A. Calvet, of Brussels, for an imported invention of "A machine for embroidering by means of two double needles and two continuous threads."—Dated 3rd April, 1862.—(English Patent, 24th March, 1862.)

12,397. M. V. Jouannet, represented by A. Calvet, of Brussels, for an imported invention of "Syrup of glucose of carob-beans."—Dated 3rd April, 1862.—(French Patent, 25th March, 1862.)

12,398. J. Caselli, represented by H. Biebuyck, of Brussels, for "Improvements in the construction of telegraphic apparatus, and in the mode of working the same."—Dated 3rd April, 1852.

12,399. W. and B. Douglas, represented by E. Antonissen, of Antwerp, a Patent of Improvement for "A system of protecting pumps from the action of frost."—Dated 3rd April, 1862.—(Original Patent, 4th October, 1861.)

12,402. Ch. Bertrand, of Lambermont-Verviers, for "A machine for washing or scouring wool, silk, cotton, &c., and their residues in general."—Dated 3rd April, 1862.

12,401. F. Durré, for "An apparatus for fastening Lefaucheux' cartridges.—Dated 1st April, 1862.

12,400. F. Gilbert, of Dour, for "Coke-kilns, and collecting the useful products of distilled coal."—Dated 4th April, 1862.

12,403. J. Pruvost-Bauchart, of Mons, for an imported invention of "A kneading machine."—Dated 4th April, 1862.—(French Patent, 17th March, 1862.)

12,404. G. L. P. Eyre, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in processes for preserving stone, bricks, tiles, &c., and in the manufacture of artificial stone, cement, &c."—Dated 5th April, 1862.—(Coombe's English Patent, 14th March, 1861.)

12,405. G. L. P. Eyre, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the treatment of silicates with a metallic base, and in the simultaneous production of fluo-silicic acid."—Dated 5th April, 1862.—(Cobly's English Patent, 9th July, 1861.)

12,406. G. L P. Eyre, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of fluo-silicates with a metallic or non-metallic base, in applying the same to the manufacture of glass, porcelain, &c."—Dated 5th April, 1862.—(Cobley's English Patent, 8th July, 1861.)

12,407. Defrey, Houssier, and Leprrêtre, represented by A. Crooy, of Brussels, for "Manufacture of waterproof coatings for linen cloth."—Dated 5th April, 1862.

12,408. P. J. Courant, of Diest, for "A swing motion for windows."—Dated 7th April, 1862.

12,409. E. Lefèvre-Morant, of Lodelinsart-Charleroi, for "Improvements in moulds for glass pantiles or tiles."—Dated 8th April, 1862.

12,410. L. E. Lavigne, represented by A. Calvet, of Brussels, for an imported invention of "Manure with a base of peat."—Dated 7th April, 1862.—(French Patent, 25th March, 1862.)

12,411. P. A. Doury, represented by A. Calvet, of Brussels, for an imported invention of "A kind of smoking-pipe."—Dated 7th April, 1862.—(French Patent, 18th November, 1861.)

12,412. J. C. T. Devaux, represented by A. Calvet, of Brussels, for an imported invention of "An apparatus for obtaining double or triple copies of handwriting."—Dated 7th April, 1862.—(French Patent, 29th March, 1862.)

12,413. W. G. Creamer, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in railway-breaks."—Dated 7th April, 1862.—(French Patent, 5th October, 1861.)

12,414. P. F. Tannez and E. H. Maîtrejean, represented by O. Daillencourt, of Brussels, for an imported invention of "A safety apparatus applicable to whims and machines for raising and lower-

ing weights."—Dated 7th April, 1862.—(French Patent, 13th December, 1860.)

12,415. J. Mareschal, represented by O. Daillencourt, of Brussels, for an imported invention of "An apparatus for superseding stair-cases, called 'Noria of dwellings.'"—Dated 7th April, 1862.—(French Patent, 30th November, 1861.)

12,416. A. J. and R. N. Ambler and W. Martin, represented by O. Daillencourt, of Brussels, for an imported invention of "Improvements in railway breaks."—Dated 7th April, 1862.—(French Patent, 27th March, 1862.)

12,417. F. A. Dufournel, represented by O. Daillencourt, of Brussels, for an imported invention of "Applying electricity to refining pig-iron about to be converted into iron or steel."—Dated 7th April, 1862.—(Original Patent, 21st November, 1861.)

12,418. J. Marshall, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in acoustic apparatus."—Dated 7th April, 1862.—(French Patent, 2nd April, 1862.)

12,419. F. Seiler, represented by C. Halot, of Molenbeck St. Jean, a Patent of Improvement for "A system of aëro-hydraulic sluicers."—Dated 7th April, 1862.—(Original Patent, 31st July, 1861.)

12,420. F. H. Fontaine, represented by L. De Meckenheim, of Ixelles, for an imported invention of "A so-called 'Chalcopantographic process for obtaining reproduction and engravings on metal."—Dated 8th April, 1862.—(French Patent, 16th September, 1861.)

12,421. G. Knox, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in pulp strainers."—Dated 8th April, 1862.—(English Patent, 4th October, 1861.)

12,422. C. De Coster, of Jemmapes-Mons, for "Improvements in the construction of bread ovens heated by coal."—Dated 8th April, 1862.—English Patent, 4th October, 1861.)

12,423. J. Camby, represented by H. Vandesande, of Boussu, for "A rocking lever and break applicable to mills, machines, &c."—Dated 8th April, 1862.

12,424. Andris Lamrert, A. Brison, and A. Pivout, of Marchienne-au-Pont Fontaine l'Evêque, for "A moveable platform applicable to crushing stampers, with pulleys for guiding them in the up-and-down movement."—Dated 8th April, 1862.

12,425. H. Bertieaux, of Antwerp, for "Improvements in steam-engines."—Dated 8th April, 1862.

12,426. H. Schippers, of Malines, for "Improvements in endless saws for cutting all kinds of perpendicular and inclined curves in wood."—Dated 10th April, 1862.

List of Specifications published during the week ending 19th April, 1862.

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2251	1*s.* 4*d.*	Johnson, J. H.—(*A communication from A. Reiniger.*)—Machinery for making cigars.
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2253	3*d.*	Brooman, R. A.—(*A communication from S. Vigoureux.*)—Mixed colored thread.
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2256	3*d.*	Tyson, T. S.—Self-acting lubricator for corves and wagons.
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2263	3*d.*	Dauncey, J. A.—Collars and wristbands.
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B. WOODCROFT.

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Applications for Letters Patent.

(*22nd, 23rd, and 24th April,* 1862.)

1166. Thomas Lea, of Smethwick, near Birmingham, in the county of Stafford, Bellhanger, and Samuel Smith, of the same place, Bellhanger, for an invention of "Improvements in burglary alarms or indicators."—Dated 22nd April, 1862.

1167. Edward Henry Cradock Monckton, of Thurloe Place, South Kensington, in the county of Middlesex, Esquire, for an invention of "Improvements in umbrellas, parasols, awnings, tents, and covering cloths, and in waterproofing the same."—Dated 22nd April, 1862.

1168. Silas Safford Putnam, of Dorchester, county of Norfolk and state of Massachusetts, United States of America, for an invention of "Certain improvements in machines for forging horse shoe nails and other articles."—Dated 22nd April, 1862.

1169. Charles Earp Elliott, of No. 5, Aldermanbury Postern, in the city of London, for an invention of "Improvements in the preparation of dried yeast."—A communication to him from abroad by Messrs. Grossberger and Kurz, of Nuremberg, in the kingdom of Bavaria, Lead Pencil Manufacturers.—Dated 22nd April, 1862.

1170. Charles Webster, of Park Steps, Ilkeston Road, Radford, in the county of Nottingham, Locksmith, for an invention of "Improvements in self-acting fountains, adapted for garden engines, fire engines, and for raising and forcing water from mines, wells, and other places."—Dated 22nd April, 1862.

1171. Arthur Warner, of Threadneedle Street, in the city of London, Merchant, for an invention of "Improvements in the construction of vessels of war and in floating or other batteries."—Dated 22nd April, 1862.

1172. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in apparatus for propelling and manœuvring ships."—A communication to him from abroad by Jean Pierre Victor Le Rouge and Jacques Henri Charles De Berly, of Paris, in the empire of France.—Dated 22nd April, 1862.

1173. George Scoville, of Wood's Hotel, Furnivals Inn, in the city of London, Attorney at Law, for an invention of "Improvements in pistons for steam engines."—A communication to him from abroad by Augustus James Scoville and Augustus Hervey De Clercq, of Bloomington, Illinois, United States of America.—Dated 22nd April, 1862.

1174. Robert Boby, of Bury St. Edmunds, in the county of Suffolk, Agricultural Implement Maker, for an invention of "Improvements in the construction of apparatus for rolling or crushing land."—Dated 22nd April, 1862.

1175. Richard Jinks, of No. 20, Upper King Street, Bloomsbury, in the county of Middlesex, Window Blind Maker, for an invention of "Improvements in apparatus for suspending, raising, and lowering Venetian blinds, and for retaining them and other blinds, and also curtains and sun shades, at any required heighth."—Dated 23rd April, 1862.

1176. Luke Holden, of Burnley, in the county of Lancaster, Saddler, for an invention of "Certain improvements in harness for animals of draught and burden."—Dated 23rd April, 1862.

1177. William Moir, of the city of Manchester, Gentleman, for an invention of "An improved instrument for ascertaining the specific gravity of liquids."—Dated 23rd April, 1862.

1178. George Norton Bates, of New Basford, in the county of Nottingham, for an invention for "Improvements in dressing lace and other fabrics."—Dated 23rd April, 1862.

1179. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in lubricating apparatus."—A communication to him from abroad by M. Leon Amenc, Oil Manufacturer, of Paris, in the empire of France.—Dated 23rd April, 1862.

1180. William Carpenter, of Greenwich, in the county of Kent, Printer, for an invention of "An improved method of printing in colours."—Dated 23rd April, 1862.

1181. James Price, of Dundalk, Ireland, Civil Engineer, for an invention of "Improvements in spikes for railways and other purposes, and in the mode of manufacturing and securing the same."—Dated 23rd April, 1862.

1182. Alexander Robertson, of 22, Bachelor's Walk, in the city of Dublin, Surgical Instrument Maker, and Richard Barter, of St. Anne's, Blarney, in the county of Cork, Ireland, Doctor of Medicine, for an invention of "Improvements in apparatus for distributing and projecting fluids either for surgical, sanatory, or domestic purposes."—Dated 23rd April, 1862.

1183. William Fear, junior, of the city of Bristol, Veneer Cutter, for an invention of "Improved arrangements for joining the saw plates of veneer and other saws constructed in segments."—Dated 23rd April, 1862.

1184. Alfred Hodgkinson, of Glenville Bleach Works, Belfast, in the county of Antrim, Ireland, for an invention of "A mixture or composition to be used in the process of boiling, preparing, or bleaching vegetable substances, whether they are in the manufactured or unmanufactured state, which mixture may also be used in the manufacture of soap."—Dated 23rd April, 1862.

1185. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in apparatus for taking deep sea soundings, and for recording the speed of ships."—A communication to him from abroad by William Trowbridge, of the Engineer Agency, 5, Bowling Green, New York, United States of America.—Dated 23rd April, 1862.

1186. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in the construction of elliptic springs for wheel carriages and other purposes."—A communication to him from abroad by the inventor Jabez Marshall Woodward, a person resident at Brooklyn, in the county of Kings and state of New York, in the United States of America.—Dated 23rd April, 1862.

1187. Alfred Vincent Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improvements in looms for manufacturing tufted pile fabrics, and in the mode of operating such looms."—A communication to him from abroad by Halcyon Skinner, of West Farms, West Chester county, state of New York, United States of America.—Dated 23rd April, 1862.

1188. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved fertilizing composition."—A communication to him from abroad by John McAuley Gallacher, of Roxbury, county of Norfolk, Massachusetts, United States of America.—Dated 23rd April, 1862.

1189. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of imitation lace, net, or openwork fabrics."—A communication to him from abroad by Lucien Henry L'heureux, Eugene Victor L'heureux and Charles Alphonse L'heureux, of Rue St. Sébastien, Paris.—Dated 23rd April, 1862.

1190. Charles Edwin Heinke, of 79, Great Portland Street, in the county of Middlesex, Submarine Engineer, for an invention of "Improvements in diving helmets, dresses, and apparatus, parts of which improvements may also be employed for extinguishing fires in ships and other confined places."—Dated 23rd April, 1862.

1191. John Endean, of Locksfields, Walworth, in the county of Surrey, Brass Founder, for an invention of "Improvements in cocks, taps, and valves."—Dated 24th April, 1862.

1192. William Haggett, of Sherborne, in the county of Dorset, Architect and Surveyor, for an invention of "Improvements in locomotive engines and carriages for railways, part of which improvements are applicable to carriages and vehicles for tram and common roads."—Dated 25th April, 1862.

1193. Henry Wheatley, of Hopton Mills Mirfield, in the county of York, Woollen Manufacturer, for an invention of "Improvements in or applicable to the employment of steam for heating or drying purposes."—Dated 24th April, 1862.

1194. John Bond, of Burnley, in the county of Lancaster, Machine Maker, for an invention of "Certain improvements in projectiles, which improvements are applicable to horns attached to vessels for war purposes."—Dated 24th April, 1862.

1195. William Denny Ruck, of No. 8, Duke Street, London Bridge, in the borough of Southwark and county of Surrey, Merchant, for an invention of "The manufacture of grease from coal tar, coal oil, creosote, or dead oil."—Dated 24th April, 1862.

1196. John Winsborrow, of No. 4, Samson Terrace, Marlborough Road, Dalston, in the county of Middlesex, Gas Meter Maker, for an invention of "Improvements in wet gas meters."—Dated 24th April, 1862.

1197. George Davies, of Bellevue Terrace, Seven Sisters' Road, Holloway, in the county of Middlesex, Mat Maker, for an invention of "Improvements in the manufacture of matting, and in apparatus for the same."—Dated 24th April, 1862.

1198. Joseph Adolphe Traversier, of 2, Rue Sainte Appoline, France, and of 4, South Street, Finsbury, London, for an invention of "Some improvements in making ladies' bonnets."—Dated 24th April, 1862.

1199. John Franklin Allen, of the city, county, and state of New York, in the United States of America, Engineer, for an invention of "Improvements in slide valves and valve gear for steam engines."—Dated 24th April, 1862.

1200. George Washington Belding, of No. 7, King Street, Cheapside, in the city of London, Gentleman, for an invention of "Improvements in harrows or cultivators."—A communication to him from abroad by Willis Churchill, of Newark, in the state of New Jersey, United States of America, Machinist.—Dated 24th April, 1862.

1201. Frederick Dangerfield, of Bedford Street, in the city of Westminster, Lithographer, for an invention of "Improvements in lithographic or zincographic presses."—Dated 24th April, 1862.

1202. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "An improvement or improvements in the lining, repairing, or 'fettling' of puddling furnaces."—Dated 24th April, 1862.

1203. Joseph Offord, of Wells Street, Oxford Street, in the county of Middlesex, for an invention of "Improvements in carriages."—Dated 24th April, 1862.

1204. Rudolf Zimara, of St. Petersburg, in the empire of Russia, Engineer, for an invention of "Improvements in stoves for heating and ventilating buildings."—Dated 24th April, 1862.

1205. Thomas Woodhouse Ashby, of Stamford, Agricultural Implement Maker, for an invention of "Improved apparatus for obtaining motive power from the wind."—A communication to him from abroad by Messieurs Hanswald and Dittmar, of Riga, in the empire of Russia—Dated 24th April, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

107. To Samuel Wilmer Marsh, of the city of Washington, in the district of Columbia, and United States of America, for the invention of "Improvements in breech loading fire-arms."

On his petition, recorded in the Office of the Commissioners on the 14th day of January, 1862.

782. To Daniel Edwards Siebe, of Mason Street, Lambeth, in the county of Surrey, Engineer and Machinist, for the invention of "Improvements in machinery or apparatus for refrigerating or producing cold, part of which improvements are applicable also to other purposes."

784. And to William Joseph Curtis, of 13, Tufnell Park Road, Holloway, Civil Engineer, for the invention of "An apparatus to ascertain and point out the fares and earnings or receipts of public vehicles and their conductors."

On both their petitions, recorded in the Office of the Commissioners on the 21st day of March, 1862.

899. To Léonce Bernard Schmolle, of Upper John Street, Golden Square, in the county of Middlesex, Importer of French Goods, for the invention of "Improvements in the construction of crinolines or steel skirts."

On his petition, recorded in the Office of the Commissioners on the 31st day of March, 1862.

923. To George Holcroft, of the city of Manchester, Consulting Engineer, for the invention of "Improvements in the construction of blast furnaces."

935. And to William Leopard, of Hurstpierpoint, in the county of Sussex, Corn Merchant, for the invention of "Improvements in railway brake apparatus."

On both their petitions, recorded in the Office of the Commissioners on the 2nd day of April, 1862.

937. To Gustave Rebour, of No. 15, Passage des Petites Ecuries, in the city of Paris, in the empire of France, Advocate, for the invention of "A permanent autographic log serving to measure, and if needed to retrace graphically the swiftness and sailing of a ship, the rapidity of streams, and the propelling of rising and ebbing tides."

941. To John Newton, of No. 5, Montpellier Road, Rye Lane, Peckham, in the county of Surrey, Contractor, for the invention of "Improvements in the construction of breakwaters, piers, and sea walls."

943. To Robert Moore Toogood and John Laybourne, both of Newport, in the county of Monmouth, Engineers, trading as "The Isca Foundry Company," for the invention of "An improvement in railway crossings."

945. To Mark Amos, of Westbury-on-Trym, in the county of Gloucester, for the invention of "Improvements in harrows.

949. And to William Antil Richards, of Chester Cottage, Cornwall Place, Holloway, in the county of Middlesex, Commercial Clerk, for the invention of "Improvements in the manufacture of bags, and in fastenings and locks for bags, parts of the invention being also applicable to purses, cigar cases, reticules, and other similar articles."

On their several petitions, recorded in the Office of the Commissioners on the 3rd day of April, 1862.

951. To John Francis Woodall, of 28, Orchard Street, Portman Square, in the county of Middlesex, for the invention of "Improvements in ventilating carriages for common roads."

953. To Francis Spencer, of Pendleton, in the county of Lancaster, Manufacturer, for the invention of "Certain improvements in looms for weaving."

954. To William Ryder, of Bolton-le-Moors, in the county of Lancaster, Roller and Spindle Maker, for the invention of "Improvements in the construction of machines for forging metals."

955. To Frederick Collier Bakewell, of No. 6, Haverstock Terrace, Hampstead, in the county of Middlesex, for the invention of "Improvements in letter printing machines."—A communication to him from abroad by William Bullock, of Pittsburgh, in the state of Pennsylvania, North America.

957. To Leonard Lindley and Frederick Taylor, Sewing Machine Manufacturers, of Melbourne Street, Mansfield Road, and Comyn Street, Nottingham, in the county of the town of Not-

tingham, for the invention of "Improvements in sewing and embroidering machines."

959. To GEORGE MOULTON, of the city of Manchester, in the county of Lancaster, Engineer, for the invention of "Improvements in pentagraph machines used for tracing or engraving rollers or cylinders employed in printing calicoes and other surfaces."

961. To ALFRED JOSEPH HALE, of William Street, Margaret Street, Clerkenwell, in the county of Middlesex, Die Sinker, for the invention of "Improvements in instruments for drawing ovals."

963. To SAMUEL FIELDING, SAMUEL FIELDING the younger, ROBERT FIELDING, and THOMAS FIELDING, all of Smallbridge, near Rochdale, in the county of Lancaster, for the invention of "Improvements in valves and in apparatus for lubricating the same and other parts of steam engines."

965. To JAFFRAY SCEALES, of Lloyd's, in the city of London, Surveyor, for the invention of "Improvements in steering ships."

966. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the manufacture of iron and steel."—A communication to him from abroad by Aristide Balthazar Berard, of Rue St. Sébastien, Paris, in the empire of France.

967. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in pumps for ships' use and other purposes."—A communication to him from abroad by Thomas Hansbrow, of the city and county of Sacramento, California, United States of America.

969. And to JOHN NOCK and WILLIAM KIRBY PRICE of Birmingham, in the county of Warwick, Gas Stove Manufacturers, for the invention of "An improvement or improvements in gas cooking ranges."

On their several petitions, recorded in the Office of the Commissioners on the 4th day of April, 1862.

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973. To HENRY JOSEPH SIMLICK, of Baker's Arms Gardens, Wellington Row, Bethnal Green, in the county of Middlesex, Vesuvian Manufacturer, for the invention of "Improvements in the manufacture of vesuvians or cigar lights."

975. To ALEXANDER CLARK, of Gate Street, Lincoln's Inn Fields, in the county of Middlesex, Engineer and Revolving Shutter Manufacturer, for the invention of "Improvements in the manufacture of revolving window shutters and blinds, in window sash bars and plates, also in apparatus used in such manufactures."

976. To LEOPOLD FACONNET, of 52, Rue du Transit Vaugirard, in the city of Paris, in the empire of France, Tile Manufacturer, for the invention of "A new kind of tiles."

977. And to RICHARD ALEXANDER KOBITZSCH, of Bucharest, in Wallachia, for the invention of "Improvements in diving apparatus, and apparatus to be used for working in deep water."

On their several petitions, recorded in the Office of the Commissioners on the 5th day of April, 1862.

981. To TITUS SMITH, of Salford, in the county of Lancaster, Machinist and Bolt Maker, for the invention of "Improvements in machinery for cutting and shaping screw bolts and other articles."

983. To ALFRED HARRIS, of Birmingham, in the county of Warwick, Gun Barrel Manufacturer, for the invention of "An improvement or improvements in the manufacture of gun barrels."

986. To WILLIAM NEWZAM NICHOLSON, of Newark, in the county of Nottingham, Agricultural Implement Maker, for the invention of "Improvements in ranges and stoves."

987. And to THOMAS JACKSON, of Orchard Street, Portman Square, in the county of Middlesex, Pianoforte Manufacturer, for the invention of "Improvements in pianofortes."

On their several petitions, recorded in the Office of the Commissioners on the 7th day of April, 1862.

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991. To JAMES BROWN, of Aldgate, in the city of London, Chemist, for the invention of "Improvements in protecting the bottoms and sides of ships and other entirely or partially submerged surfaces."

995. To The Honourable WILLIAM EDWARD FITZ MAURICE, of 12, Hyde Park Gate, in the county of Middlesex, for the invention of "An improved construction of plating for ships, batteries, and other structures used for war or other purposes."

997. To FREDERICK WILLIAM BREAREY, of No. 53, Cornhill, in the city of London, for the invention of "Improvements in medicated cups or vessels for drinking purposes."

1003. To JOHN LAWSON, one of the partners in the firm of Samuel Lawson and Sons, of the Hope Foundry, Leeds, in the county of York, for the invention of "Improvements in balling cotton and thread."—A communication to him from abroad by Adolphe Alphonse Poullier, a person resident at Lille, in the empire of France.

1005. And to THOMAS COBLEY, Metallurgist, and JAMES WRIGHT, Civil Engineer, both of 42, Bridge Street, Blackfriars, in the city of London, for the invention of "Improvements in the method of, and the apparatus for, treating auriferous and argentiferous minerals and ores for the purpose of extracting and separating the gold and silver from the other metals, minerals, and substances combined therewith, also in the method of treating the various residues resulting therefrom, and in the utilization, application, and use of the said residues when so treated."

On their several petitions, recorded in the Office of the Commissioners on the 8th day of April, 1862.

1007. To JAMES EDWARD HYDE ANDREW, of Audenshaw, in the county of Lancaster, Machinist, for the invention of "Improvements in looms for weaving."

1009. To GEORGE HOLLINSHED, of Salford, near Manchester, in the county of Lancaster, Designer, for the invention of "Improvements in sandwich cases and similar articles."

1011. To WILLIAM TAYLOR, of Oldham, in the county of Lancaster, Cotton Spinner, for the invention of "Certain improvements in machinery or apparatus for preparing and spinning cotton or other fibrous materials."

1015. To Colin Mather, of Willow Bank, Brompton, near Manchester, in the county of Lancaster, Gentleman, for the invention of "Improvements in spittoons."

1017. To William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "An improved apparatus for raising and forcing water and other liquids."—A communication to him from abroad by Abel Brear, of Sangatuck, county of Fairfield, state of Connecticut, United States of America.

1019. And to Robert Theyson, of Hanover, for the invention of "Improvements in cork cutting machinery."

On their several petitions, recorded in the Office of the Commissioners on the 9th day of April, 1862.

1020. To Edward Funnell, of 54, East Street, Brighton, in the county of Sussex, Watch and Clock Manufacturer, for the invention of "An improved self-acting indicator signal for railways."

1025. To Alexander Black, of Banbridge, in the county of Down, Ireland, Law Clerk, for the invention of "Improvements in swing bridges adapted for crossing lines of railways and other ways."

1027. To Cowper Phipps Coles, of Southsea, in the county of Hants, Captain Royal Navy, for the invention of "Improvements in masts for ships."

1029. To Louis Christoph, of Paris, in the empire of France, William Hawksworth, of Linlithgow, North Britain, Steel Manufacturer, and Gustavus Palmer Harding, of Paris, Merchant, for the invention of "Improvements in drawing metals, and in the machinery or apparatus employed therein."

1031. To John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, William Richardson, of the same place, Mechanical Engineer, and William Holland, of Salford, in the said county, Cotton Spinner, for the invention of "Improvements in carding engines."

1033. To George Burge, of Albert Road, Regent's Park, in the county of Middlesex, Contractor, for the invention of "An improved means of protecting forts, ships, and other structures and places against projectiles and other striking bodies."

1035. To Osborne Reynolds, of Debach, near Woodbridge, in the county of Suffolk, Clerk, for the invention of "Improvements in building ships and other vessels."

1037. And to William Fox, of Amiens, in the empire of France, for the invention of "Improvements in the manufacture of brooms and brushes."

On their several petitions, recorded in the Office of the Commissioners on the 10th day of April, 1862.

1039. To Henry Holland, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "Improvements in manufacturing the stretcher joints of umbrellas and parasols."

1040. To James Thomas Grice, of Birmingham, in the county of Warwick, Tube Maker, for the invention of "Improvements in the manufacture of twisted metallic tubes."

1042. To John Garnett, of Windermere, in the county of Westmoreland, Printer and Stationer, for the invention of "Improvements in apparatus for washing photographic pictures."

1044. To Jules François Mathias, of 22, Rue de Chalons, Paris, in the empire of France, Hat Manufacturer, for the invention of "An apparatus for pressing and ironing straw hats of any shape or form."

1045. To François Rigollot, of No. 15, Passage des Petites Ecuries, Paris, in the empire of France, for the invention of "Improvements in machinery or apparatus for manufacturing rivcting pegs for boots and shoes and other pins or pegs."

1046. To Jean Marie Landmann, Incumbent of the parish of Ste. Croix, in the town of Algiers and colony of Algeria, for the invention of "Improvements in hydraulic engines."

1047. To Thomas Knowles, James Houghton, William Knowles, and William Houghton, of Gomersal, in the county of York, Machine Makers, for the invention of "Improvements in looms for weaving."

1048. To Ellis Butterworth, of Calder Cottage, near Rochdale, in the county of Lancaster, Consulting Engineer and Patent Agent, for the invention of "Improvements in machinery for applying adhesive substances to preserve the form of cops of yarn."

1049. To William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the manufacture of leathern accoutrements."—A communication to him from abroad by Messrs. Adolphe Blanc and Jean Frédéric Auguste Marty, both of 29, Boulevart St. Martin, Paris.

1050. To William Bush, of Tower Hill, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the construction of ships and shields."

1053. And to Isaac Whitesmith, of Glasgow, in the county of Lanark, North Britain, Machine Maker, for the invention of "Improvements in power looms, and in pirn winding apparatus."

On their several petitions, recorded in the Office of the Commissioners on the 11th day of April, 1862.

1055. To Nicholas Nussey, of Holbeck, near Leeds, in the county of York, Mechanic, for the invention of "Improvements in machinery or apparatus for preparing and combing wool, flax, hair, cotton, silk, and other fibrous materials."

1056. To Ernest Bollée, of Le Mans, department of La Sarthe, in the empire of France, Founder, for the invention of "A new hydraulic ram."

1057. To Andrew Sweet, of Hampstead Road, in the county of Middlesex, Ironmonger, for the invention of "Certain improvements in locks and latches."

1058. To Edgar Drewett, of Blackheath, in the county of Kent, Photographer, for the invention of "Improvements in bottles and other vessels whereby to separate and retain sediment from their contents."

1059. To Archibald Samuels Campbell, of Hampstead, in the county of Middlesex, Gentleman, for the invention of "Improvements in surface condensers."

1060. And to Archibald Samuels Campbell, of Hampstead, in the county of Middlesex, Gentleman, for the invention of "Improvements in the refrigeration of liquids."

On their several petitions, recorded in the Office of the Commissioners on the 12th day of April, 1862.

1061. To James Park, of Bury, in the county of Lancaster, Engineer, for the invention of "Certain improvements in or applicable to steam engines."

1062. To Edward Peyton, of Birmingham, in the county of Warwick, Manufacturer, and William Fothergill Baths, of the same place, Manager, for the invention of "Improvements in angle iron, applicable to metallic bedsteads, roofs, bridges, and other similar purposes."

1063. To John Frederick Spencer, of Newcastle-on-Tyne, Consulting Engineer, for the invention of "Improvements in steam engines."

1064. To Henry Clay Lee, of 11, Lawrence Poultney Lane, in the city of London, Engineer, for the invention of "Improvements in knitting machines."

1066. To John Beard, of Leonard Stanley, in the county of Gloucester, Mechanical Engineer, for the invention of "An improvement or improvements in sofa beds or sofa bedsteads."

1067. To James Martin French, of Birmingham, in the county of Warwick, Pianoforte Manufacturer, for the invention of "Improvements in upright pianofortes."

1068. To John Darlington, of 26, Gresham Street, in the city of London, Mining Engineer, for the invention of "Improvements in the arrangement of marine telegraph wires and cables."

1069. To Joseph Kaye Hampshire, of the parish of Whittington, in the county of Derby, Civil Engineer, for the invention of "A safety cage with disconnecting catch to prevent accidents in the working of coal or other mines arising from the over winding or breaking of the ropes or other parts used for hoisting purposes."

1071. To Charles Harratt, of Hornsey Lane, Highgate, in the county of Middlesex, for the invention of "Improvements in the manufacture of masts, yards, and booms."

1073. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent for the invention of "Improvements in reaping and mowing machines."—A communication to him from abroad by Ernest Clement, of 23, Boulevart de Strasbourg, Paris, France.

1075. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in pumps."—A communication to him from abroad by Jean Marie Henri Paul Metivier, of 34, Rue Keller, Paris, France.

1076. And to Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "An improved hobby horse."—A communication to him from abroad by Amedée Constant Ponceau, of Rue des Vieux Augustins, Paris, France.

On their several petitions, recorded in the Office of the Commissioners on the 14th day of April, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

Notice is hereby given, that the petition of

1124. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, praying for Letters Patent for the invention of "Improvements in sewing machines,"—a communication to him from abroad by William Grover, of the Grover and Baker Sewing Machine Company, a person resident at Boston, state of Massachusetts, United States of America,—was deposited and recorded in the Office of the Commissioners on the 17th day of April, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

25th April, 1862.

2691. William Taylor, of Newport Pagnell, in the county of Buckingham, Soda Water Manufacturer, for an invention of "Improvements in joints or connections for metal, and other pipes and tubes."—Dated 26th October, 1861.

2693. George Hutton, of Manchester, in the county of Lancaster, Cap Manufacturer, trading under the firm of Beckton and Company, for an invention of "Improvements in hats, caps, and other such coverings for the head."—Dated 26th October, 1861.

2702. John Watt, of 35, Lorrimore Street, Walworth, in the county of Surrey, Chemist, and Thomas Snaith Haviside, of 69, Cornhill, in the city of London, Gentleman, for an invention of "Improvements in the manufacture of soap."—Dated 29th October, 1861.

2708. William Holland Furlonge, of Mark Lane, in the city of London, Merchant, for an invention of "Improvements in the condensation of steam by surface contact."—Dated 29th October, 1861.

2711. John Eaglesfield, of Devizes, in the county of Wilts, Watchmaker, for an invention of "Improvements in gas burners."—Dated 29th October, 1861.

2712. John Samuel Jackson, of Pendleton, in the county of Lancaster, Warehouseman, for an invention of "Improvements in the treatment of woven fabrics known as cords."—Dated 29th October, 1861.

2714. John Hayward, of Everton, Liverpool, in the county of Lancaster, for an invention of "Improvements in means or apparatus for raising water or other fluids."—Dated 29th October, 1861.

2716. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the preparation or treatment of skins and hides."—A communication to him from abroad by Doctor Friedrich Knapp, of Munich, in the kingdom of Bavaria.—Dated 29th October, 1861.

2735. George Holcroft, of the city of Manchester, Consulting Engineer, for an invention of "Improvements in the construction of blast furnaces for smelting ores."—Dated 1st November, 1861.

2744. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "An improvement or improvements in the manufacture of cast steel or of homogeneous iron."—Dated 1st November, 1861.

2761. George Evans, of 69, Glocester Terrace, Portman Square, for an invention of "Improvements in treating peat to render it useful as fuel and for illuminating and metallurgical purposes."—Dated 2nd November, 1861.

2804. Henry Montucci, Ph. Dr., of 38, Rue du Sentier, Paris, in the empire of France, for an invention of "Improvements in apparatus for goffering or embossing stuffs in high relief."—Dated 8th November, 1861.

2824. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in portable and other filters."—A communication to him from abroad by Jules Pacôme, Alfred Haward, and Jean Baptiste Bourgoisc, of 29, Boulevart St. Martin, Paris, Mechanicians.—Dated 9th November, 1861.

2837. George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improvements in bleaching cotton and other textile fabrics or materials, and in the apparatus employed in such process."—A communication to him from abroad by Edouard Turpault, of Paris, Bleacher.—Dated 12th November, 1861.

2850. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "The application of electricity in refining cast iron for the purpose of converting it into wrought iron or steel, with or without the addition of other agents."—A communication to him from abroad by François Alphonse Adéodat Dufournel, of 29, Boulevart St. Martin, Paris, Iron Master.—Dated 13th November, 1861.

2949. Eugène Alexandre Rouvière, ainé, of 51, Rue de Malte, Paris, in the empire of France, for an invention of "An improved pump."—Dated 23rd November, 1861.

2973. George Bottomley, of St. George's Place, Leeds, in the county of York, Gentleman, for an invention of "Improved machinery for cutting up linen, cotton, woollen, and other rags, fibrous waste, or vegetable substances, for various purposes in the industrial arts."—Dated 26th November, 1861.

2996. Samuel Amphlet, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in ornamenting surfaces."—Dated 27th November, 1861.

3001. Samuel Alfred Carpenter, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in attaching name plates or labels to umbrellas, parasols, walking sticks, and whips."—Dated 28th November, 1861.

3015. Edward Tyer, of 15, Old Jewry Chambers, in the city of London, for an invention of "Improvements in electric telegraphs."—Dated 29th November, 1861.

Patents which have become Void.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 50*l*., before the Expiration of the Third Year from the date of such Patents, pursuant to the Act of the 16 Vict. c. 5, sec. 2, for the week ending the 19th day of April, 1862.

923. Richard Emery, of No. 6, King Street, St. James's Square, in the city of Westminster and county of Middlesex, Gentleman, for an invention of "Certain improvements in carriages for common roads."—Dated 13th April, 1859.

926. Richard Coleman, of Chelmsford, in the county of Essex, Agricultural Implement Manufacturer, for an invention of "Improvements in agricultural implements."—Dated 13th April, 1859.

928. William Craft, of No. 12, Cambridge Road, Hammersmith, and Thomas Wilson, of Bradmore House, Chiswick, both in the county of Middlesex, for an invention of "Improvements in the manufacture of pinafores and bibs for children."—Dated 13th April, 1859.

929. Alfred Richard Johnson, of Saint John's Wood, in the county of Middlesex, Gentleman, for an invention of "An instrument for damping, severing, and affixing postage and other like stamps."—Dated 13th April, 1859.

930 John Ambrose Coffey, of 4, Providence Row, Finsbury, in the county of Middlesex, Engineer, for an invention of "Improvements in apparatus for heating liquids."—Dated 13th April, 1859.

934. John Gillett, of Upper Brailes, in the county of Warwickshire, Agricultural Implement Maker, for an invention of "An improved mill used for grinding, crushing, and reducing bones and other mineral and vegetable substances."—Dated 14th April, 1859.

936. Thomas Bird, of the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in the application and use of a certain natural product or products in the manufacture of pickers for looms, drawing rollers for spinning machinery, cop tubes, and for steps and bushes generally where lubrication is required."—Dated 14th April, 1859.

939. Ebenezer Partridge, of Stourbridge, in the county of Worcester, Engineer and Iron Founder, for an invention of "An improvement in the manufacture of 'pipe' boxes for cart and wagon axles."—Dated 14th April, 1859.

942. William Sinnock, of Brompton, in the county of Kent, Ropery Engineer, for an invention of "Improvements in submarine and subterrancan electric telegraph cables, and in machinery for the manufacture thereof."—Dated 14th April, 1859.

945. Stephen Barnwell, of Coventry, in the county of Warwick, Manufacturer, and Alexander Rollason, of Birmingham, in the same county, Chemist, for an invention of "Improvements in the manufacture of umbrellas, parasols, hats, or hat covers, caps, capes, coats, mantles, dresses, gloves, and other similar articles."—Dated 14th April, 1859.

946. Germain Abeillou, of Toulouse, a town of France, Joiners' Tool Manufacturer, for an invention of "An extensible arching plane."—Dated 15th April, 1859.

948. John Chapman, of Wolverhampton, in the county of Stafford, Iron Master, for an invention of "An improvement or improvements in the manufacture of angle iron."—Dated 15th April, 1859.

952. Henry Barrow, of Birmingham, in the county of Warwick, Saddler, for an invention of "A new or improved fastening for fastening trunks, boxes, and articles of dress, and for such other purposes as the same is or may be applicable to."—Dated 16th April, 1859.

954. John Glasgow and Samuel Hand, of the city of Manchester, in the county of Lancaster, for an invention of "An improved variable circular motion applicable to slotting, shaping, and planing machines or similar purposes."—Dated 16th April, 1859.

956. William Clark, of 53, Chancery Lane in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in apparatus for separating metals from their ores and other matters."—A communication from abroad by Henri François Toussaint, Chemist, and Louis Napoleon Langlois, Civil Engineer, both of Paris.—Dated 16th April, 1859.

958. John Hamilton, of No. 8, Exchange Square, Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in apparatus for regulating prime movers driven by water."—Dated 16th April, 1859.

959. Alfred Courage, of Bagillt, in the county of Flint, Smelter, for an invention of "An improved method of obtaining the metallic particles contained in fumes or vapours from lead and other smelting works."—Dated 16th April, 1859.

967. Jozé Luis, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, Patent Agent, for an invention of "An improved machine for raising water."—A communication from abroad by M. Dupré, of No. 10, Rue Mogador, Paris, in the empire of France.—Dated 18th April, 1859.

971. John Whitaker, of Bedford Mill Iron Works, near Leigh, in the county of Lancaster, Agricultural Machine Maker, for "Improvements in mowing machines."—Dated 18th April, 1859.

981. Frederick Edwards and William Edwards, of the city of Coventry, Machinists, for an invention of "Improvements in looms for weaving ribbons and other like goods."—Dated 18th April, 1859.

982. William Parsons, of Pont-ar-Tawe, near Swansea, in the county of Glamorgan, Tin Plate Manufacturer, for an invention of "Improvements in preparing sheet iron and other metal sheets for japanners and other uses."—Dated 18th April, 1859.

985. Peter Reynolds, of Belfast, in the county of Antrim, Ireland, and James Reynolds, of the same place, Engineers and Machinists, for an invention of "Improvements in machinery or apparatus for hackling flax and other fibrous materials."—Dated 19th April, 1859.

986. Christopher Batty, of Manchester, in the county of Lancaster, Collector, for an invention of "An improved means or apparatus for effecting instantaneous communication on railways between passengers and officials."—Dated 19th April, 1859.

987. Isaac Dutton, of Tipton, in the county of Stafford, Whitesmith, and Robert Martin, of Dudley, in the county of Worcester, Coke Merchant, and Thomas Phillips, of Dudley aforesaid, Coke Merchant, for an invention of "New or improved machinery for preventing accidents in coal or other mines by the drawing of skips or cages over their pulleys."—Dated 19th April, 1859.

988. Alexander William Williamson, of University College, London, for an invention of "Improvements in making extracts from liquorice root."—Dated 19th April, 1859.

991. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improved machinery for weaving seamless bags or other articles with hemispherical or regular or irregular ends or forms."—A communication from abroad by John Pender, of the United States of America.—Dated 19th April, 1859.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 100*l.*, before the Expiration of the Seventh Year from the date of such Patents, pursuant to the Act of the 16 Vict. c. 5, sec. 2, for the week ending the 19th day of April, 1862.

819. Thomas Wimpenny, of Holmfirth, in the county of York, Manufacturer, and Jonas Wimpenny, of Rawtenstall, in the county of Lancaster, Surgeon, for an invention of "Certain improvements in machinery or apparatus for drawing and spinning wool or wool mixed with other fibrous substances."—Dated 13th April, 1855.

835. Edward Hammond Bentall, of Heybridge, in the county of Essex, Ironfounder, for an invention of "An improvement in the construction of harrows."—Dated 16th April, 1855.

836. John Cowley, of Quennington Paper Mills, Gloucestershire, and Daniel Peyton Sullivan, of Stockwell, Surrey, for an invention of "Improvements in the manufacture of paper."—Dated 16th April, 1855.

841. Philippe Amédée Devy, of 10, Old Jewry Chambers, Old Jewry, for an invention of "Improvements in the frames of swing looking-glasses."—Dated 17th April, 1855.

849. Henry Woodhouse, of Stafford, in the county of Stafford, Engineer, for an invention of "Improvements in the construction of crossings for the permanent way of railways."—Dated 18th April, 1855.

858. John Lawson, of Leeds, in the county of York, Machine Maker, and Somerville Dear, of the same place, Machine Maker, for an invention of "Improvements in machinery for combing and cleaning flax, tow, wool, and cotton, and other fibrous substances."—Dated 18th April, 1855.

Erratum in Journal of 22nd April, 1862.

17. For "John Jacob, of Gutknecht," read "John Jacob Gutknecht."

DELIVERY OF LETTERS.—For the Great Seal Patent Office the initials are W. C., the District being the Western Central. In the direction of a Letter, these initials should be legibly written in a separate line, and should in all cases end the address, thus:—

The Commissioners of Patents,
Great Seal Patent Office,
25, Southampton Buildings,
London,
W.C.

FOREIGN PATENTS.



AUSTRIA.*

List of Patents which were Granted, Prolonged, and became Void during the month of February, 1862.†

(*Communicated by the Austrian Government.*)

1. Patents granted.

56. Alexander Adrian Despreaux, of Versailles, represented by Friedrich Rödiger, Vienna, for "A new method of printing, applicable to all fabrics and tissues, for imitating figured and embroidered stuffs obtained by Jacquart machines, and apparatus belonging thereto."—1 year.—(Secret.)—Dated 2nd February, 1862.

57. Ludwig Heinrich Bouillete and Johann Amable Hyvelin, of Paris, represented by A. Martin, Paris, for "A new application of microscopic photographs."—1 year.—(Secret.)—Dated 5th February, 1862.

58. Moriz Schwab, of Pest, for "Manufacture of waterproof tarpaulins."—1 year.—(Secret.)—Dated 5th February, 1862.

59. Wilhelm Barthel, sen., of Hernals, for "A machine-fan moved by self-acting motive power."—1 year.—(Public.)—Dated 7th February, 1862.

60. Emil Fleischhauer, of Eisenach, represented by A. Martin, of Vienna, for "Improvements in his patent gas-regulator."—1 year.—(Secret.)—Dated 7th February, 1862.

61. Alois Röhrich and Franz Ebert, of Unterdrauburg, Carinthia, for "A peculiar machine for the manufacture of wooden pegs with regular points."—1 year.—(Secret.)—Dated 7th February, 1862.

62. Jacob Tschuggmall and Georg Elsner, of Innsbruck, for "Improvements in impregnating wood, and moveable apparatus belonging thereto."—1 year.—(Secret.)—Dated 7th February, 1862.

63. Joseph Tyler, of England, represented by Georg Märkl, Vienna, for "Improvements in the manufacture of clarinets."—3 years.—(Secret.)—Dated 7th February, 1862.

64. Felix Alexander Testud de Beauregard, of Paris, represented by Fr. Rödiger, Vienna, for "A new blast with a superheating apparatus applicable to fire-places of steam-engines, smelting

* For the Austrian Patent Law, see No. 291 of this Journal.
† In the case of inventions patented in other states as well as in Austria, the Specifications (whether described as "public" or not) may in most cases be consulted, or translations of them be had, at the Library of the Commissioners' Office.

and baking furnaces."—1 year.—(Secret.)—Dated 7th February, 1862.

65. Joseph Büchler, of Pest, for "Applying a silk fabric to the brims and flaps of hats and bonnets."—1 year.—(Secret.)—Dated 7th February, 1862.

66. Carl Müller, of Steyr, for "A peculiar rifle for hunting."—1 year.—(Secret.)—Dated 7th February, 1862.

67. Albert Eckstein, of Gumpoldskirchen, Vienna, for "Manufacture of ice-bags from vegetable parchment."—1 year.—(Secret.)—Dated 7th February, 1862.

68. Johann Jacob Gutknecht, of Neuhof, near Zizers, Switzerland, represented by Joseph Kaufmann, of Bludenz, Tyrol, for "Improvements in his patent gas-meter."—1 year.—(Secret.)—Dated 7th February, 1862.

69. Joseph Stapf, of Hall, and Maximilian Mayr, for "Improvements in the manufacture of steel and iron by means of a new method of hardening."—2 year.—(Secret.)—Dated 7th February, 1862.

70. Franz Zeilinger, of Uibelbach, near Peggau, Styria, for "Removing slags and cinders from scythes in an unhardened state, and giving a white polish or silvery colour to scythes in a hardened state."—3 years.—(Secret.)—Dated 9th February, 1862.

71. Grossberger and Kurz, of Nuremberg, represented by Carl Kuhn, of Vienna, for "So-called 'Stone ferment.'"—4 years.—Dated 9th February, 1862.—(Bavarian Patent, 1st November, 1861.)

72. Leopold and Moises Pollak, and Moises Perelis, of Prague, for "Improvements in cleaning and disinfecting bed feathers."—2 years.—(Secret.)—Dated 9th February, 1862.

73. Absolon Hippolyte Leptai, of Avignon, and and Jules François Joseph Cuisinier, of Francières, France, represented by Fr. Rödiger, Vienna, for "A process and peculiar apparatus for reviving animal charcoal in sugar works"—2 years.—(Secret.)—Dated 9th February, 1862.

74. Joseph Rudolph Lindler, of Pest, for "New crinolines."—1 year.—(Public.)—Dated 10th February, 1862.

75. Mathieu Louis Michel Descoutures, of Paris, represented by Fr. Rödiger, Vienna, for "Improvements in fire-arms."—1 year.—(Secret.) Dated 12th February, 1862.

76. Franz Ignaz Auspitzer, of Klattau, for "A peculiar mode of obtaining woven plaits for shirts."—1 year.—(Secret.)—Dated 12th February, 1862.

77. Samuel Stockton White, of Philadelphia, represented by Fr. Rödiger, Vienna, for "Improvements in artificial teeth."—1 year.—(Secret.)—Dated 12th February, 1862.

78. Johann Howorka, of Brünn, for "Manufacture of plates of asbest and pasteboard of amianth for roofings."—1 year.—(Secret.)—Dated 16th February, 1862.

79. L. C. Zamarski and C. Dittmarsch, of Vienna, for "Manufacture of playing cards of one piece."—2 years.—(Secret.)—Dated 16th February, 1862.

80. L. C. Zamarski and C. Dittmarsch, of Vienna, for "Manufacture of playing cards in oil colours, printed on common printing presses."—2 years.—(Secret.)—Dated 16th February, 1862.

81. Joseph Prosper Olier, of Paris, represented by Fr. Rödiger, Vienna, for "A safety paper for preventing forgeries of banknotes and other documents."—1 year.—(Secret.)—Dated 16th February, 1862.

82. Stanislaus Vigoureux, of Reims, France, represented by Fr. Rödiger, Vienna, for "A process for obtaining many coloured mixtures of fibrous substances."—1 year.—(Secret.)—Dated 16th February, 1862.

83. Joseph Thein, of Prague, for "Peculiar pressed yeast."—1 year.—(Secret.)—Dated 16th February, 1862.

84. Ferdinand Götz and Elias Schütz, of Prague, for "Refining vegetable oils so as not to be injurious to health in burning or to machines in lubricating."—1 year.—(Secret.)—Dated 16th February, 1862.

85. August Ernst Müller and Heinrich Simon Wiese, of Hadrunek, near Troppau, Silesia, for "A controlling clock for registering the real expenditure of motive-power in machines."—1 year.—(Secret.)—Dated 16th February, 1862.

86. Georg Märkl, of Vienna, for "Improvements in cards for cotton and other fibrous substances."—3 years.—(Public.)—Dated 22nd February, 1862.

87. Franz Bienert, of Maaderhäuser, Bohemia, for "Improvements in strings of pianofortes."—1 year.—(Secret.)—Dated 22nd February, 1862.

88. Peter Fischer, of Gratz, for "An apparatus for economizing condensing water and fuel."—3 years.—(Secret.)—Dated 22nd February, 1862.

89. Ferdinand Hanke, of Steierdorf, Banat, for "An atmospheric engine."—1 year.—(Secret.)—Dated 23rd February, 1862.

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2. Patents prolonged.

65. Carl Preisenhammer, for "Improvements in the manufacture of rod and pig iron by means of alloys of tungsten."—2nd year.—(Secret.)—Dated 28th January, 1861.

66. Carl Trumann, for "A new composition for cutting and polishing marble, granite, and other stones."—9th year.—(Secret.)—Dated 19th January, 1854.

67. Katharina Petersilka, for "Manufacture of artificial wool from the residue of wool or cloth."—3rd year.—(Public.)—Dated 21st January, 1860.

68. Alexander Weiss, for "Improvements in the manufacture of waterproof foot-coverings."—3rd year.—(Secret.)—Dated 11th April, 1859.

69. Anton Perner, for "A peculiar machine for the manufacture of wooden pegs."—3rd year.—(Secret.)—Dated 8th January, 1860.—(Maintained only with respect to the combination of various mechanical contrivances for the manufacture of said machine, and annulled for the rest by decree of 6th December, 1861.)

70. Johann Baptist Weiss, of Vienna, for "A parallel regulating plane."—3rd year.—(Secret.)—Dated 8th February, 1860.

71. Johann Kienzle, for "Improvements in machines for cleaning corn."—2nd year.—(Secret.)—Dated 25th January, 1861.

72. Joseph Dollinger, for "Protecting the sides of industrial objects of wood from injurious effects, such as damp, &c."—6th year.—(Public.)—Dated 28th January, 1857.

73. Joseph Pohlmann, for "Vegetable balsamic pomatum."—Dated 6th year.—(Secret.)—Dated 28th January, 1857.

74. Franz Wojtech, for "Manufacture of embossed silk, gold, and silver flags and standards." 6th–10th years.—(Public.)—Dated 8th February, 1857.

75. Ignaz Hellmer, for "Improvements in distilling apparatus and process for the manufacture of stearic candles and elaic soap."—6th year.—(Secret.)—Dated 15th February, 1857.

76. Gustav Adolph Buchholz, for "A machine for husking corn, &c."—3rd year.—(Secret.)—Dated 21st January, 1860.

77. Johann Bapt. Weiss, for "So-called 'Parallel regulating planes.'"—3rd year.—(Secret.)—Dated 4th February, 1860.

78. Carl Albert Mayerhofer, for "Improvements in Morse's electric telegraphs."—2nd year.—(Public.)—Dated 23rd January, 1861.

79. Mathias C. Karl, for "Tiles."—2nd year.—(Public.)—Dated 23rd January, 1861.

80. Wilhelm Samuel Dobbs, for "Closed fire-doors for steam engines and other fire apparatus."—2nd year.—(Secret.)—Dated 25th January, 1861.

81. Moriz Becherer and C. Kesseler, for "An apparatus for pressing hollow bricks."—2nd year.—(Public.)—Dated 28th January, 1861.

82. Julius Johann Révy, for "Using progressive screws for propelling vessels."—2nd year.—(Secret.)—Dated 28th January, 1861.

83. Joseph Schnapp, for "Manufacture of starch from feculent substances by means of steam."—2nd year.—(Secret.)—Dated 28th January, 1861.

84. Leopold Köppel, for "Advertising apparatus."—2nd year.—(Secret.)—Dated 28th January, 1861.

85. Nadoult De Buffon, for "Tubular filters for clarifying water."—2nd year.—(Public.)—Dated 1st February, 1861.

86. Carl Girardet, for "A slide-buckle with a fixed tongue."—2nd year.—(Public.)—Dated 1st February, 1861.

87. Caroline Klein, for "A coating for floors, tables, and other furniture."—2nd year.—(Secret.) Dated 1st February, 1861.

88. August Gürth, for "Manufacture of silk from vegetable substances."—2nd year.—(Secret.)—Dated 2nd March, 1861.

89. Gustav Klöckner, for "An instrument for measuring distances and heights."—2nd–5th years.—(Secret.)—Dated 29th March, 1861.

90. Adolph Targier and Nicolous Tharavet, for "A process for obtaining photograpphs by means of charcoal."—2nd year.—(Secret.)—Dated 3rd June, 1861.

91. Marie Mally, for "Manufacture of a toilet article from oriental plants, called 'Meditrina,' for preserving the hair."—4th year.—(Secret.)—Dated 4th April, 1859.

92. Julien Fbançois Belleville, for "An inexplosive steam-generator."—3rd year.—Public.)—Dated 3rd March, 1860.

93. Carl Gangloff, for "A concentric shingle machine."—7th year.—(Public.)—Dated 12th April, 1856.

94. Ferdinand Gruber, for "So-called 'Economical shirt fronts.'"—6th year.—(Public.)—Dated 20th January, 1857.

95. Joseph Hall, for "Improvements in the construction of locomotives."—6th–10th years.—(Secret.)—Dated 6th February, 1857.

96. Georg Spencer, for "Improvements in caoutchouc springs."—6th–10th years.—(Public.)—Dated 7th June, 1857.

97. Joseph Herz, for "A so-called 'Vegetable dermatine liniment.'"—3rd year.—(Public.)—Dated 5th February, 1860.

98. R. S. Kirkpatrick, for "Improvements in wheels of railway carriages."—3rd year.—(Public.)—Dated 3rd May, 1860.

99. Gottfried Oswald, for "A machine for obtaining bread raspings."—2nd year.—(Secret.)—Dated 2nd March, 1861.

100. Alexander Bonzanini, for "Manufacture of lighting gas from peat, other fossils, and vegetable residues."—4th year.—(Secret.)—Dated 9th January, 1859.

101. Hermann Büttner, for "Improvements in the distributing slides of locomotives."—2nd year.—(Secret.)—Dated 18th February, 1861.

102. Joseph Winter and Emanuel Hofkeller, for "Peculiar gas burners."—9th ycar.—(Public.)—Dated 6th March, 1854.

103. J. Johann Nader, for "Peculiar filters for impregnating alcoholic liquids with ctherial oils and essences."—2nd year.—(Secret.)—Dated 11th February, 1861.

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3. Patents which have become void.

56. Joseph Cavalli, for "Presses for pressing names, stars, &c. from cloth."—Dated 3rd August, 1853; expired 3rd August, 1861.

57. A. M. Pollak, for "Improvements in the manufacture of igniting articles."—Dated 16th August, 1854; expired 16th August, 1861.

58. Neuburg and Eckstein, for "A peculiar substance for the manufacture of matches."—Dated 15th August, 1855; expired 15th August, 1861.

59. Joseph Hermann, for "A new system of printing fabrics and shawls."—Dated 2nd August, 1856; expired 2nd August, 1861.

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* The Specifications of these Patents may be consulted in the original language, or translations be had at the Public Free Library.

60. Nicolaus Joseph Leonard, for "Washing all kinds of wool in cold water."—Dated 5th August, 1856; expired 5th August, 1861.

61. Mathias Quinz, Franz Ederer, and Franz Sonnleithner, for "Improvements in continuous and periodical lime kilns and their fireplaces."—Dated 7th August, 1856; expired 7th August, 1861.

62. Antonio Coda-Canati, for "Hydraulic staircases."—Dated 11th August, 1856; expired 11th August, 1861.

63. Achille Cortesi, for "Transmission of motion between wheels, or wheels with straight rods, whilst the surfaces of contact surround each other in the shape of a wedge."—Dated 17th August, 1856; expired 17th August, 1861.

64. Sebastian Bocciardo, for "A new process for preparing hides."—Dated 26th August, 1856; expired 26th August, 1861.

65. Stanislaus Waguza, for "A peculiar construction of harvesting machines."—Dated 27th August, 1856; expired 27th August, 1861.

66. Caspar Wilhelm Fleischmann, for "Manufacture of pressed yeast from molasses."—Dated 29th August, 1856; expired 29th August, 1861.

67. Hermann Hirschl and Wolf Wltzek, for "Improvements in the manufacture of yarn."—Dated 12th August, 1857; expired 12th August, 1861.

68. Louis Laiblin, for "Improvements in apparatus for boiling rags."—Dated 30th August, 1857; expired 30th August, 1861.

69. Ferdinand Wedel-Jarlsberg, for "Controlling compasses."—Dated 2nd August, 1858; expired 2nd August, 1861.

70. Joseph Schroefle, for "Improvements in waterproof ventilating woollen fabrics."—Dated 10th August, 1858; expired 10th August, 1861.

71. Georg Gleischner, for "Improvements in vine scissors."—Dated 14th August, 1858; expired 14th August, 1861.

72. John Chadwik and Arthur Elliott, for "Improvements in machines for winding off silk directly from cocoons and spooling the same."—Dated 16th August, 1858; expired 16th August, 1861.

73. Ignaz Pfliger, for "Improvements in apparatus for loading coal on railway carriages."—Dated 10th August, 1859; expired 10th August, 1861.

74. Johann Julius Wilhelm Spindler, for "Manufacture and application of a peculiar red dyeing substance, called 'Fuchsine.'"—Dated 11th August, 1859; expired 11th August, 1861.

75. Carl Pfraumer, for "Improvements in the manufacture of cast steel by employing a larger amount of pig iron and flux, and for giving it a greater degree of hardness by another substance."—Dated 11th August, 1859; expired 11th August, 1861.

76. Johann Felix Miguel, of "A peculiar truss."—Dated 15th August, 1859; expired 15th August, 1861.

77. Felix Alexander Testud de Beauregard, for "A peculiar spheroidal steam generator."—Dated 20th August, 1859; expired 80th August, 1861.

78. Franz Vouillon and Achilles Mercier, for "Manufacture of cloth and other fabrics from yarn made by a peculiar apparatus."—Dated 7th August, 1860; expired 7th August, 1861.

79. Pierre Marie Emorine, for "Manufacture of compact and cheap fuel from the waste of coals."—Dated 7th August, 1860; expired 7th August, 1861.

80. Joseph Cordrian, for "Coating letters and stereotype plates by means of simple or mixed metal."—Dated 7th August, 1860; expired 7th August, 1861.

81. Heinrich Ressel, for "A peculiar carriage for ship guns with eccentric wheels."—Dated 7th August, 1860; expired 7th August, 1861.

82. Julius Quaglio, for "A fire-grate for economizing fuel"—Dated 9th August, 1860; expired 9th August, 1861.

83. Georg Märkl, for "A parallel universal lathe."—Dated 9th August, 1860; expired 9th August, 1861.

84. Johann Maria Joseph Desgabriel, for "An electric apparatus for preventiag railway collisions."—Dated 9th August, 1860; expired 9th August, 1861.

85. Moriz Greiner, for "Peculiar writing exercises made by clay types."—Dated 9th August, 1860; expired 9th August, 1861.

86. Joseph Horak, for "Taps with a cleaning apparatus."—Dated 9th August, 1860; expired 9th August, 1861.

87. Eduard Krejczy, for "A balloon that can be governed."—Dated 9th August, 1860; expired 9th August, 1861.

88. Friedrich Jasper, for "A universal cutting and rasping machine."—Dated 9th August, 1860; expired 9th August, 1861.

89. Georg Eschberger, for "Presses for copying, pressing fancy articles, &c."—Dated 10th August, 1860; expired 10th August, 1861.

90. Joseph Laula, for "Manufacture of chenille."—Dated 10th August, 1860; expired 10th August, 1861.

91. Johann Schmidmayer, for "Coating steel and wire of reeds or combs by means of a metal for protecting them from oxide."—Dated 13th August, 1860; expired 13th August, 1861.

92. Joseph Popper, for "A peculiar motor."—Dated 17th August, 1860; expired 17th August, 1861.

93. Camillo Joseph Proal, for "Applying silk cotton, or woollen fabrics ornamented with photographs to the manufacture of various industrial objects."—Dated 21st August, 1860; expired 21st August, 1861.

94. Peter Carl Ratel, for "An anvil for setting scythes and other edge tools."—Dated 21st August 1860; expired 21st August, 1861.

95. Friedrich Kirchner, for "Propelling vessels by means of the pressure of water."—Dated 21st August, 1860; expired 21st August, 1861.

96. Peter Generini, for "A so-called 'Carbonometer.'"—Dated 23rd August, 1860; expired 23rd August, 1861.

97. Adolph Az, for "A hair-dye, called 'Misopoline.'"—Dated 26th August, 1860; expired 26th August, 1861.

98. Adolph Az, for "A liquid for removing the down from the skin of ladies." — Dated 30th August, 1860; expired 30th August, 1861.

19. Joseph Rohrbach, for "Improvements in the construction of omnibus."—Dated 9th February, 1859; annulled 6th February, 1862, for not being novel.

100. Franz Heine, for "Manufacture of the so-called 'Schemnitz clay pipes' from porcelain."—Dated 29th September, 1859; annulled 7th February, 1862, for not being novel.

101. Gustav Fichtner, for "A new fastening of breech-loading guns."—Dated 26th May, 1861; disclaimed 19th October, 1861.

102. Antonio Christofoli, for "Applying a stone substance made into a solid paste to floors, &c."—Dated 16th September, 1850; expired 16th September, 1861.

103. Girolamo Bertoni, for "A machine for cutting dyeing and medicinal wood into pieces."—Dated 10th September, 1851; expired 10th September, 1861.

PATENT RIGHTS in the COLONIES.—Abstract of Replies to the Secretary of State's Circular Despatch of July 11, 1856, calling for Information as to the Form of the Application to be made by Persons desirous of obtaining Patent Rights in the Colonies, and the Expenses attendant on the Grant of such Patent Rights. Price 2*s*.

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1206. Silas Covell Salisbury, of Coventry, in the county of Warwick, Engineer, for an invention of "Improvements in the construction of sewing machines."—Dated 25th April, 1862.

1207. Frederic Barnett, residing at Paris, No. 164, Rue de Rivoli, late of No. 60, St. Mary Axe, in the city of London, for an invention of "Improved electric danger signals for railways and other cognate purposes."—Dated 25th April, 1862.

1208. George Richards, of No. 12, Caroline Street, Bedford Square, in the county of Middlesex, Esqre., for an invention of "Improvements in ordnance, and the manner of loading such with the charges and projectiles suitable thereto."—Dated 25th April, 1862.

1209. John Francis Brunet, of No. 21, King William Street, Strand, in the county of Middlesex, Special Agent of the Imperial Commissioners of France for "International Exhibition" of 1862, for an invention of "Improvements in the manufacture of fringes."—A communication to him from abroad by Edme Paul Villain, of Paris, empire of France, Manufacturer.—Dated 25th April, 1862.

1210. Richard Christopher Mansell, of Ashford, in the county of Kent, Engineer, for an invention of "Improvements in the construction of wheels to be used on railways."—Dated 25th April,1862.

1211. Peter Robert Drummond, of Perth, North Britain, for an invention of "A revolving rake."— Dated 25th April, 1862.

1212. John Taylor Davies, of Liverpool, in the county of Lancaster, Provision Merchant, for an invention of "Improvements in circuit horse powers."—Communicated to him from abroad by Stuart Perry, of Newport, in the state of New York, one of the United States of America.—Dated 25th April, 1862.

1213. Richard Percy Roberts, of 3, Exeter Villas, Kennington Oval, in the county of Surrey, for an invention of "Improvements in the preparation of paper for copying letters and other documents, and in the preparation of copying ink."—Dated 25th April, 1862.

1214. John Elder, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in steam engines and boilers."—Dated 25th April, 1862.

1215. John Shaw, of Liverpool, in the county of Lancaster, for an invention of "Improvements in steam and other power engines and indicators."—A communication to him from abroad by John Shaw the younger, of Ferrol, in Spain.—Dated 25th April, 1862.

1216. James Aspinall, of Middlesborough-on-Tees, in the county of York, for an invention of "An improved apparatus for the safe conveyance from sea to land of ships' papers, documents, money, and other valuables when wrecks or other casualties occur at sea."—Dated 25th April, 1862.

1217. Charles Reed, of Kintbury, in the county of Berks, Esquire, for an invention of "A new method of treating the sorghum saccharatum or holcus saccharatus in order to obtain saccharine liquor and pulp therefrom."—Dated 25th April, 1862.

1218. Alexander Carnegie Kirk, of Bathgate, North Britain, Engineer, for an invention of "Improvements in refrigerating apparatus."— Dated 25th April, 1862.

1219. Augustus Applegarth, of Dartford, in the county of Kent, for an invention of "Improvements in printing in colors and in apparatus to be employed for this purpose."—Dated 25th April, 1862.

1220. William Hale, of No. 6, John Street, Adelphi, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in rockets."—Dated 25th April, 1862.

1221. William Fisken, of Stamfordham, in the county of Northumberland, Presbyterian Minister, for an invention of "Improved apparatus for cultivating land by means of steam power."—Dated 25th April, 1862.

1222. Lachlan McLachlan, of Manchester, in the county of Lancaster, Photographic Artist, for an invention of "Improvements in governing or regulating light used for taking photographic portraits and other photographic pictures, part of which improvements is also applicable to lighting picture galleries."—Dated 25th April, 1862.

1223. Enrico Angelo Ludovico Negretti and Joseph Warren Zambra, both of Hatton Garden, in the city of London, Meteorological Instrument Makers, for an invention of "Improvements in the construction of mercurial minimum thermometers."—Dated 25th April, 1862.

1224. William Edward Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in chimnies for lamps.—A communication to him from abroad by Harvey Brown, of New York city, United States of America.—Dated 25th April, 1862.

1225. Dudley Charlds Le Souëf, of Twickenham, in the county of Middlesex, England, for an invention of "An improvement in the manufacture of nails, bolts, rivets, screws, eyes, and split keys or pins."—A communication to him from abroad by John Schuberth, of Vienna, in Austria.—Dated 26th April, 1862.

1226. Thomas Unett Brocklehurst, of the firm of Messrs. J. and T. Brocklehurst and Sons, of Macclesfield, in the county of Chester, Silk Manufacturers, for an invention of "Improvements in machinery for reeling singles, trains, organzines, and sewing silks."—Dated 26th April, 1862.

1227. George Henry Law, of 17, Rochester Road, Camden New Town, Gentleman, for an invention of "Improved means for draining flower pots and other articles or things which require draining in the same or a similar manner."—Dated 26th April, 1862.

1228. John Gay Newton Alleyne, of the Butterley Iron Works, Alfreton, in the county of Derby, for an invention of "Improvements in machinery and apparatus for the preparation and manufacture of iron and steel.—Dated 26th April, 1862.

1229. Emile Alcan, of Coleman Street Buildings, in the city of London, Merchant, for an invention of "An improvement in or addition to carding engines."—A communication to him from abroad by Celestin Martin, of Pepinster, Belgium.—Dated 26th April, 1862.

1230. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in collars, wrist bands, and cuffs."—A communication to him from abroad by Jules Hippolyte Jean Baptiste Delosme, of 29, Boulevart St. Martin, Paris, Merchant.—Dated 26th April, 1862.

1231. Squier Cheavin and George Cheavin (his son), both of Boston, in the county of Lincoln, for an invention of "Improvements in filtering and purifying water, and in apparatus employed therein."—Dated 26th April, 1862.

1232. Francis Gybbon Spilsbury and Frederick William Emerson, both of Stratford in the county of Essex, Chemists, for an invention of "Improvements in the treatment of fusee oil, and for various applications of the same to useful purposes."—Dated 26th April, 1862.

1233. Arthur Boyle, of Birmingham, in the county of Warwick, Tool Maker, and Thomas Warwick, of Birmingham aforesaid, Machinist, for an invention of "New or improved machinery for manufacturing hair pins and cottar pins, a part of which machinery may also be used for cutting off and pointing wires for various purposes."—Dated 26th April, 1862.

1234. Herbert William Hart, of Higher Broughton, Manchester, in the county of Lancaster, Engineer, for an invention of "Improvements in the manufacture of reflectors and shades for gas and other lights."—Dated 26th April, 1862.

1235. Gustav Bischof, junior, of Swansea, for an invention of "Improvements in treating solutions containing copper and silver, or either of them, to obtain metallic copper and silver."—Dated 26th April, 1862.

1236. George Hedgecombe Smith, of North Perrott, in the county of Somerset, Twine and Web Manufacturer, for an invention of "Improvements in the manufacture of crinoline or elastic hoops for dresses."—Dated 26th April, 1862.

1237. Aaron Lester, of Coventry, in the county of Warwick, Draftsman and Designer, for an invention of "Improvements in the manufacture of the fronts or uppers of slippers, shoes, boots, and gaiters, and of mats, bags, fire screens, and various other articles which are usually made of ornamental or Berlin needlework."—Dated 26th April, 1862.

1238. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improvements in the manufacture of hollow glass ware."—A communication to him from abroad by Messrs. Atterbury and Reddick, of Pittsburg, Alleghany, United States of America.—Dated 26th April, 1862.

1239. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improvements in lamps for burning coal oil and other hydro-carbons."—A communication to him from abroad by Bradford Ripley Alden, of New York city, United States of America.—Dated 26th April, 1862.

1240. George Barry Goodman, of No. 29, Baker Street, Portman Square, London, in the county of Middlesex, Auctioneer, for an invention of "Improvements in preventing accidents in or at mine shafts."—Dated 28th April, 1862.

1241. John Burnie, of Castle-Douglass, in the county of Kirkcudbright, North Britain, Implement Maker, for an invention of "Improvements in tobacco pipes."—Dated 28th April, 1862.

1242. John Fletcher, of Farnham Place, Southwark, in the county of Surrey, Engineer, for an invention of "Improvements in the apparatuses for treating saccharine liquids." — Dated 28th April, 1862.

1243. Robert Vaile, of Auckland, New Zealand, for an invention of "Improvements in propellers for ships and boats."—Dated 28th April, 1862.

Notices to Proceed.

Notice is hereby given, that

3163. John Dale, of Manchester, in the county Lancaster, Manufacturing Chemist, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "Improvements in the manufacture of glue or size."

3165. And John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Richardson, of the same place, Mechanical Engineer, have given the like notice in respect of the invention of "Improvements in machinery or apparatus commonly called 'gins,' for cleaning cotton from seeds."

As set forth in their respective petitions, both recorded in the said office on the 17*th day of December,* 1861.

3166. And Robert Scott, of 29, Great Portland Street, in the county of Middlesex, Gun Maker, has given the like notice in respect of the invention of "An improved method of rifling or grooving the barrels of firearms and ordnance."

3173. And John Piddington, of 52, Gracechurch Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improved condensing apparatus for steam engines."—A communication to him from abroad by Wilhelm Winter, of Charlottenburg, near Berlin, in the kingdom of Prussia.

3175. And Charles Edward Symonds, of No. 56, Stone's End, in the borough of Southwark, Oil and Colour Merchant, has given the like notice in respect of the invention of "Improvements in the treatment and application to various useful purposes of light spirituous liquids."

3179. And Charles Pontifex, of St. Paul's Road, Islington, in the county of Middlesex, and of Shoe Lane, in the city of London, Coppersmith and Vat Maker, has given the like notice in respect of the invention of "Improvements in refrigerators for cooling worts or other liquors."

As set forth in their respective petitions, all recorded in the said office on the 18*th day of December,* 1861.

3183. And Eli Stott, of Ashton-under-Lyne, in the county of Lancaster, Machinist, has given the like notice in respect of the invention of "Improvements in apparatus used for collecting and removing of waste and dirt which occurs in the process of spinning cotton and other fibrous materials."

As set forth in his petition, recorded in the said office on the 19*th day of December,* 1861.

3187. And James Standfield, of Aylsford, in the county of Kent, Engineer, and John Standfield, of Stratford, in the county of Essex, Engineer, have given the like notice in respect of the invention of "Improvements in machinery or apparatus for giving motion to ships and machinery, and for raising water."

3193. And George Walkland, of Saint Pierre-les-Calais, in the French empire, Lace Manufacturer, has given the like notice in respect of the invention of "An improved machine for winding lace or other similar fabrics or tissues on cards or other materials."

3194. And William Tipple, of Clarence Place, Gravesend, in the county of Kent, has given the like notice in respect of the invention of "Improvements in paddle wheels for the propulsion of ships and other navigable vessels."

3195. And Vasco D'Almeida, of Nottingham Street, Marylebone, in the county of Middlesex, has given the like notice in respect of the invention of "An improved mode of obtaining colouring matter applicable for dyeing skins, silk, wool, and other fibrous materials."—A communication to him from abroad by Edward Smith, of Place Cruzquebrada, in the city of Lisbon.

3200. And Robert Wailes, of Brighton, in the county of Sussex, Doctor of Medicine, has given the like notice in respect of the invention of "An improved tool or apparatus for cleaning windows and glasses."

As set forth in their respective petitions, all recorded in the said office on the 20*th day of December,* 1861.

3207. And Filippo Grimaldi, of Teramo, kingdom of Italy, but now residing at 13, Manchester Buildings, Parliament Street, in the county of Middlesex, has given the like notice in respect of the invention of "Improvements in rotatory steam boilers."

3211. And Fraser Selby, of Surbiton, in the county of Surrey, Engineer, has given the like notice in respect of the invention of "Improvements in boilers for the generation of steam in engines, for applying steam for motive power purposes, and in wheels and ways for steam carriages to run on."

As set forth in their respective petitions, both recorded in the said office on the 21*st day of December,* 1861.

3216. And Charlotte Smith, Wife of Jabez Smith, of Bedford, in the county of Bedford, Merchant, has given the like notice in respect of the invention of "Improvements in stays."

3218. And Charlotte Smith, Wife of Jabez Smith, of Bedford, in the county of Bedford, Merchant, has given the like notice in respect of the invention of "Improvements in stays."

3223. And Edward Barnard Sampson, of Ham Mills, Stroud, in the county of Gloucester, has given the like notice in respect of the invention of "Improvements in apparatus for drying wool and other fibres and substances."

3226. And John Cochrane, of the Woodside Iron Works, Dudley, Engineer and Iron Founder, has given the like notice in respect of the invention of "Improvements in apparatus employed in sinking cylinders and open coffers for forming foundations under water."

As set forth in their respective petitions, all recorded in the said office on the 24th day of December, 1861.

3230. And Thomas Standing, of Preston, in the county of Lancaster, Ironmonger, has given the like notice in respect of the invention of "Improvements in cinder sifters and ash receptacles applicable to domestic fire grates."

3234. And James Shepherd, of the city of Manchester, in the county of Lancaster, Engineer, has given the like notice in respect of the invention of "Improvements in apparatus for cleansing steam boilers."

As set forth in their respective petitions, both recorded in the said office on the 26th day of December, 1861.

3240. And William Turner and John William Gibson, of Hammersmith, in the county of Dublin, Engineers, have given the like notice in respect of the invention of "Improvements in rolling bridges."

3242. And Thomas Bright, of Old Foundry, Carmarthen, has given the like notice in respect of the invention of "Improvements in machinery for cutting hay, straw, and other vegetable substances."

3245. And James McIntyre, of the city and state of New York, United States of America, has given the like notice in respect of the invention of "Improvements in bomb shells and similar projectiles."

As set forth in their respective petitions, all recorded in the said office on the 27th day of December, 1861.

3255. And James Gordon, of Park House, in the parish of Gateshead, and county of Durham, Manufacturer, and Bartholomew Henderson, of the South Shore, Gateshead, in the county of Durham aforesaid, Engineer, have given the like notice in respect of the invention of "Improvements in the manufacture of ropes."

As set forth in their petition, recorded in the said office on the 30th day of December, 1861.

13. And William Barker Patrick, of Highgate, in the county of Middlesex, Gentleman, has given the like notice in respect of the invention of "Improvements in the manufacture of sugar, and in the apparatus employed therein."

As set forth in his petition, recorded in the said office on the 1st day of January, 1862.

18. And William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improved apparatus for roasting coffee."—A communication to him from abroad by Jean Louis Rivret-Justin, of 15, Passage des petites Ecuries, Paris, France, Merchant.

20. And William Atkinson Fell, of Troutbeck Bridge, Windermere, in the county of Westmoreland, Machine Maker, has given the like notice in respect of the invention of "Improvements in the manufacture of bobbins, and in the means or apparatus employed therein."

As set forth in their respective petitions, both recorded in the said office on the 2nd day of January, 1862.

53. And Charles Pilkington and Thomas Pilkington, both of Sheffield, in the county of York, Joiners' Tool Manufacturers, have given the like notice in respect of the invention of "Improvements in skates."

As set forth in their petition, recorded in the said office on the 8th day of January, 1862.

71. And John Carter, of Tipton, in the county of Stafford, Machinist, has given the like notice in respect of the invention of "A new or improved draining plough."

73. And Montague Wigzell, of the Strand, Topsham, in the county of Devon, has given the like notice in respect of the invention of "An improved double-acting ventilator for railway carriages and other carriages and compartments."

As set forth in their respective petitions, both recorded in the said office on the 10th day of January, 1862.

90. And Ferdinand Charles Warlich, of 10, Alma Terrace, New Cross, in the county of Kent, Gentleman, has given the like notice in respect of the invention of "Improvements in the manufacture of artificial fuel."

As set forth in his petition, recorded in the said office on the 13th day of January, 1862.

106. And William Gorse, of Minworth, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "An improvement or improvements in machinery for manufacturing the cut nails called brads."

107. And Samuel Wilmer Marsh, of the city of Washington, in the district of Columbia, and United States of America, has given the like notice in respect of the invention of "Improvements in breech-loading fire-arms.

As set forth in their respective petitions, both recorded in the said office on the 14th day of January, 1862.

174. And William Hooper Ropes, of Crown Court, Old Broad Street, in the city of London, Merchant, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for cleaning coffee, rice, or any seed or grain having outer hull and inner pellicle."—A communication to him from abroad by William Maxwell Greene, of Tongoi, Chili, South America, Merchant.

As set forth in his petition, recorded in the said office on the 23rd day of April, 1862.

188. And Timothy Morris and Robert Weare, both of Birmingham, in the county of Warwick, Electricians, and Edward Henry Cradock Monckton, of Fineshade, in the county of North-

ampton, Esquire, have given the like notice in respect of the invention of "Improvements in submarine and other telegraphic communication, and in apparatus connected therewith."

As set forth in their petition, recorded in the said office on the 24th day of January, 1862.

293. And James Lee Norton, of No. 38, Belle Sauvage Yard, Ludgate Hill, in the city of London, has given the like notice in respect of the invention of "Improvements in beating, stretching, and drying fabrics, and in the apparatus employed therein, part of which apparatus is also applicable for thrashing linseed."—The result partly of a communication from abroad, made to him by William Aldon, of 28, Boulevart Bonne Nouvelle, Paris, in the empire of France, and partly of invention and discovery made by himself.

As set forth in his petition, recorded in the said office on the 4th day of February, 1862.

309. And Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, has given the like notice in respect of the invention of "An improvement in fire arms."—A communication to him from abroad by Caleb Hannum Bradley and Gideon Miles, of West Chester, Pennsylvania, United States of America.

As set forth in his petition, recorded in the said office on the 5th day of February, 1862.

368. And Thomas Coltman, of Leicester, Machinist, has given the like notice in respect of the invention of "Improvements in sewing machines."

As set forth in his petition, recorded in the said office on the 12th day of February, 1862.

388. And William Daniel Allen, of Laithfield House, Norfolk Road, Sheffield, has given the like notice in respect of the invention of "Improvements in the manufacture of stamp heads and beds employed in crushing ores and other mineral substances."

389. And George Crisp Burrows, of Stoke Holy Cross, in the county of Norfolk, Yeoman, has given the like notice in respect of the invention of "Improvements in lounges, seats, or other apparatus for sitting or reclining on, which improvements are also applicable to rocking horses."

As set forth in their respective petitions, both recorded in the said office on the 13th day of February, 1862.

468. And Spencer Smith, of No. 204, High Holborn, in the county of Middlesex, Engineer, has given the like notice in respect of the invention of "Improvements in electro-magnetic engines for obtaining and applying motive power."

As set forth in his petition, recorded in the said office on the 21st day of February, 1862.

494. And Thomas Partridge, senior, of 50, Tenby Street, Birmingham, in the county of Warwick, has given the like notice in respect of the invention of "Improvements in apparatus for printing railway and other tickets or cards."

As set forth in his petition, recorded in the said office on the 24th day of February, 1862.

503. And John Piddington, of No. 52, Gracechurch Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improved condensing apparatus adapted for high pressure steam engines, especially locomotive engines."—A communication to him from abroad by William Winter, of Charlottenburg, near Berlin, in the kingdom of Prussia.

As set forth in his petition, recorded in the said office on the 25th day of February, 1862.

635. And Francis Robert Newton, and Hiram Codd, both of Esher Street, in the city of Westminster, have given the like notice in respect of the invention of "An apparatus for indicating and measuring the flow of liquids."

As set forth in their petition, recorded in the said office on the 8th day of March, 1862.

647. And Jean Baptiste Gabriel Marie Frédéric Piret, of 29, Boulevart St. Martin, Paris, Civil Engineer, has given the like notice in respect of the invention of "Improvements in lubricating apparatus."

As set forth in his petition, recorded in the said office on the 10th day of March, 1862.

841. And William Louis Winans, of Brighton, in the county of Sussex, Civil Engineer, has given the like notice in respect of the invention of "A new or improved mode of mounting, and apparatus for manœuvring, ordnance in land fortifications."

As set forth in his petition, recorded in the said office on the 27th day of March, 1862.

929. And George Collier and John Collier, both of Halifax, in the county of York, Machinists, have given the like notice in respect of the invention of "Improvements in looms for weaving carpets and other pile fabrics."

As set forth in their petition, recorded in the said office on the 2nd day of April, 1862.

994. And John Whitehouse, of Birmingham, in the county of Warwick, Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of metallic door and other knobs, and the ornaments of the pillars of metallic bedsteads and other articles of like manufacture, and in attaching metallic mounts to china or earthenware knobs and ornaments, and roses for knobs."

As set forth in his petition, recorded in the said office on the 8th day of April, 1862.

1124. And George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, has given the like notice in respect of the invention of "Improvements in sewing machines."—A communication to him from abroad by William Grover, of the Grover and Baker Sewing Machine Company, a person resident at Boston, state of Massachusetts, United States of America.

As set forth in his petition, recorded in the said office on the 17th day of April, 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

29th April, 1862.

2726. Eugene De Bassano, Gentleman, and Adolphe Brudenne, Civil Engineer, both of Brussels, in the kingdom of Belgium, for an invention of "Improvements in the manufacture of stearine."—Dated 30th October, 1861.

2742. James Higgins, of Salford, in the county of Lancaster, Machine Maker, and Thomas Schofield Whitworth, of the same place, Manager, for an invention of "Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning."—Dated 1st November, 1861.

2752. James Smith Brooks, of No. 1, Cambridge Villas, Mare Street, Hackney, in the county of Middlesex, for an invention of "A new or improved back or chest protecting brace or braces."—Dated 2nd November, 1861.

2753. Alfred Fernandez Yarrow, of Arundel Square, Barnsbury, Engineer, and James Bracebridge Hilditch, of Barnsbury Villas, Gentleman, both in the county of Middlesex, for an invention of "Improvements in machinery used when ploughing, tilling, or cultivating land by steam power.—Dated 2nd November, 1861.

2754. John Charles Wilson, Manager for G. Buchanan and Co., Engineers, 25, Bucklersbury, London, Civil and Mechanical Engineer, for an invention of "Improvements in machinery or apparatus for the manufacture of sugar."—Dated 2nd November, 1861.

2757. John French, of Manchester Road, Bradford, in the county of York, Mechanic, for an invention of "Improvements in machinery or apparatus for doubling or twisting yarns of worsted or other fibrous substances."—Dated 2nd November, 1861.

2759. Samuel Osborne, of Bayswater, in the county of Middlesex, Stay Manufacturer, for an invention of "Improvements in hooped skirts."—Dated 2nd November, 1861.

2763. Thomas Spencer, of Prescot, in the county of Lancaster, Earthenware Manufacturer, and Thomas Robinson, of St. Helens, in the said county, Engineer, for an invention of "Improvements in machinery or apparatus for making pipes and other articles of earthenware, and in the form of pipes forgas, sewage, and other purposes."—The same is the result partly of a communication from abroad made to them by Alfred Delafol, of Paris, in the empire of France, and partly of invention and discovery made by themselves.—Dated 2nd November, 1861.

2770. William Thomas Weston, of No. 4, Trafalgar Square (Patent Office), in the county of Middlesex, for an invention of "An improved spring and fastening applicable to gates, doors, and other useful purposes."—Dated 4th November, 1861.

2772. Robert Wilson, of Patricroft, near the city of Manchester, Engineer, for an invention of "Certain improvements in steam hammers and in valves applicable to the same and to other steam engines."—Dated 5th November, 1861.

2776. Charles Frederick Hayes, of the Royal Small Arms Factory, Enfield, in the county of Middlesex, Engineer, for an invention of "Improvements in means or apparatus for generating steam."—Dated 5th November, 1861.

2778. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in steam generators, and in furnaces for the same."—A communication to him from abroad by Alexandre Friedmann and Frederic Emile De Erlanger, both of Paris, France.—Dated 5th November, 1861.

2788. William Ramsell, of Deptford, in the county of Kent, Engineer, for an invention of "Improvements in the construction of boats, barges, buoys, and other like structures of metal, and in machinery employed therein."—Dated 6th November, 1861.

2792. John Walmsley, of New Accrington, in the county of Lancaster, for an invention of "Improvements in looms for weaving."—Dated 7th November, 1861.

2830. James John Shedlock, of Weirdale Villas, Earls Court, Kensington, in the county of Middlesex, for an invention of "Improvements in gas meters."—Dated 11th November, 1861.

2862. Alfred Edwin Carter, of the West Middlesex Water Works, Kensington, and Thomas Hack, of the West Middlesex Water Works, Hammersmith, both in the county of Middlesex, for an invention of "Improvements in screw cocks."—Dated 13th November, 1861.

2869. Montague Wigzell, of the Strand, Topsham, in the county of Devon, for an invention of "Improvements in machinery or apparatus to be used in moulding and casting twisted nails, spiral fluted nails, bolts, and screws for sheathing vessels, shipbuilding, building, and other purposes."—Dated 14th November, 1861.

2870. Robert Heath, of 25, St. George's Place, Hyde Park Corner, in the county of Middlesex, for an invention of "An improvement in umbrellas and parasols."—Dated 14th November, 1861.

2884. Matthew Gibson, of St. Andrew's Works, Gallowgate, Newcastle-on-Tyne, for an invention of "Improvements in reaping and mowing machines."—Dated 16th November, 1861.

2972. Charles Stevens, of 31, Charing Cross, in the county of Middlesex, Patent Agent, for an invention of "An improved indelible anti-corrosive ink."—A communication to him from abroad by Louis Croc, of Paris, in the empire of France.—Dated 26th November, 1861.

3078. Cromwell Fleetwood Varley, of No. 4, Fortess Terrace, Kentish Town, in the county of Middlesex, Electrician, for an invention of "Improvements in electric telegraphs."—Dated 9th December, 1861.

3270. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improved apparatus for obtaining motive power from explosive compounds."—A communication

to him from abroad by Eugène Barsanti and Felix Matteucci, of Florence, in the kingdom of Italy.—Dated 31st December, 1861.

99. James Garth Marshall, of Leeds, in the county of York, Flax Spinner, for an invention of "Improvements in the preparation of flax, hemp, and other fibres previous to being spun."—Dated 13th January, 1862.

111. James Garth Marshall, of Leeds, in the county of York, Flax Spinner, for an invention of "Improvements in the machinery and processes for producing fibre from woven and other textile fabrics."—Dated 14th January, 1862.

206. Samuel Alfred Carpenter, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in covering and combining strips or bands of steel for crinoline or crinoline skirts."—Dated 27th January, 1862.

225. Gustave Joseph Nicolas De Ridder, of No. 57, Rue Pigale, in the city of Paris, in the empire of France, Engineer, for an invention of "Improvements in railway carriages for the conveyance of travellers and goods."—Dated 28th January, 1862.

275. Friedrich Wilhelm Daehne, of Swansea, Glamorganshire, for an invention of "Improvements in furnaces used in the manufacture of zinc."—Dated 1st Februrry, 1862.

302. Edward Fisher Smith, of Dudley, in the county of Worcester, Agent, and Thomas Swinnerton, of Dudley aforesaid, Blast Furnace Manager, for an invention of "Improvements in the manufacture of coke, and in kilns or ovens for the manufacture of coke."—Dated 5th February, 1862.

357. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in smoothing irons."—A communication to him from abroad by Charles Jean Baptiste Eugène Cailloué, of Paris, in the empire of France.—Dated 11th February, 1862.

396. Samuel Benjamin Whitfield, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in the manufacture of iron bedsteads and in the manufacture of ornamental iron tubes or columns for the construction and ornamentation of iron bedsteads."—Dated 14th February, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 26th April*, 1862, *inclusive.*)

22nd April.

1025. John Marshall, junior, of Selby, in the county of York, Gentleman, for an invention of "Improvements in filtering and depurating fluids."—Dated 23rd April, 1859.

23rd April.

1040. William Warne, John Americus Fanshawe, James Archibald Jaques, and Thomas Galpin, all of Tottenham, in the county of Middlesex, India-rubber Manufacturers, for an invention of "Improved compounds applicable for packing the joints of steam or other pipes, which compounds are also applicable for packing or lining parts of machinery in general, or parts of ships, bridges, tanks, or railways."—Dated 25th April, 1859.

25th April.

1051. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in machinery or apparatus for grinding and polishing knives and other articles of cutlery and tools."—A communication from abroad by James Dodge, of Waterford, Saratoga county, state of New York, United States of America.—Dated 26th April, 1859.

1065. Charles Randolph and John Elder, of Glasgow, in the county of Lanark, North Britain, Engineers, for an invention of "Improvements in steam-engines and boilers."—Dated 28th April, 1859.

26th April.

1062. Sir Thomas Tassell Grant, K.C.B., of 20, Chester Terrace, Regent's Park, in the county of Middlesex, for an invention of "Improvements in ships' cooking apparatus."—Dated 27th April, 1859.

1074. Arthur Boyle, of Birmingham, in the county of Warwick, Tool Maker, for an invention of "Improvements in the manufacture of certain parts of umbrellas and parasols."—Dated 28th April, 1859.

1082. William Winstanley and Joseph Kelly, of Liverpool, in the county of Lancaster, Hydraulic Engineers, for an invention of "Improvements in pumps and gearing, and appliances for working the same."—Dated 30th April, 1859.

1120. Jacob Geoghegan Willans, of 2, Clarence Place, Belfast, for an invention of "Improvements in utilizing bog stuff or peat when applied for treating metals and certain mineral and alkaline substances."—Dated 4th May, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 25th April*, 1862, *inclusive.*)

24th April.

921. Louis Alexandre Avisse, of Paris, in the empire of France, Pianoforte Manufacturer, for an invention of "Improvements in lubricating revolving shafts of all descriptions, and also the axles of railway and other wheels."—Dated 25th April, 1855.

25th April.

979. William Banks, Mechanic, Henry Hampson, Bleacher, and John Banks, Boiler Maker, all of Bolton-le-Moors, in the county of Lancaster, for an invention of "Improvements in machinery or apparatus for bleaching yarns or thread either in the cop or hank."—Dated 1st May, 1855.

FOREIGN PATENTS.



SAXONY.*

List of Patents Granted between the 1st October and 31st December, 1861.†

(*Communicated by the Saxon Government.*)

(For preceding List, see No. 868 of this Journal.)

1. Julius Köhler, of Dresden, for "A machine for bending rails."—5 years.—Dated 24th September, 1861.
2. William Whalley, of Granges, France, represented by Hermann Böhme, for "An apparatus for cleaning cards."—5 years.—Dated 24th September, 1861.
3. Wilhelm Schultze, of Berlin, for "A cylinder for linen."—5 years.—Dated 24th September, 1861.
4. Johann Gottlieb Schmidt, of Chemnitz, for "Improvements in obtaining tissues with figured warps."—5 years.—Dated 24th September, 1861.
5. Ottenheimer and Sons, of Stuttgart, for "Improvements in looms for weaving stays."—5 years.—Dated 2nd October, 1861.
6. Rudolf Haidinger, sen., of Ellbogen, Bohemia, for "A peat press."—5 years.—Dated 24th September, 1861.
7. Sondermann and Stier, of Chemnitz, for "A machine for cutting tubes of tubular boilers of locomotives."—5 years.—Dated 24th September, 1861.
8. James Green Wilson, of New York, represented by Prillwitz, Berlin, for "Improvements in stocking frames."—5 years.—Dated 26th September, 1861.
9. Lesueur, of Paris, represented by Prillwitz, of Berlin, for "Improvements in pantiles, bricks, and tiles."—5 years.—Dated 26th September, 1861.
10. Albert Voigt, of Kaüdler, near Limbach, for "Improvements in Swiss embroidering machines."—5 years.—Dated 25th September, 1861.
11. Julius Tittelbach, of Leipzig, for "A double action coal press."—5 years.—Dated 24th September, 1861.
12. F. G. Selle, of Potsdam, for "A boot jack."—5 years.—Dated 24th September, 1861.
13. August Tonner, of Eupen, for "A machine for drying and cleaning malt."—5 years.—Dated 24th September, 1861.
14. W. Richter, of Garthau, for "An artificial axle."—5 years.—Dated 7th October, 1861.
15. Edmund Thode, of Dresden, for "An apparatus for pressing liquids from thick substances."—5 years.—Dated 15th October, 1861.
16. Dr. Paul Löwenberg, of Berlin, for "A process for extracting fat and oil by means of sulphuret of carbon."—5 years.—Dated 2nd October, 1861.
17. Eduard Hofmann, of Werdau, for "A hot-air drying machine for fibrous substances."—5 years.—Dated 24th September, 1861.
18. Tenbrinck, of Paris, for "A smoke consuming fireplace with continuous action."—5 years.—Dated 22nd October, 1861.
19. Jacob Rieter and Co., of Winterthur, represented by Findeisen, of Chemnitz, for "Accumulators of hydraulic power."—5 years.—Dated 16th October, 1861.
20. August Peinert, of Schönau, near Chemnitz, for "A simple stocking frame."—5 years.—Dated 25th October, 1861.
21. Ferdinand Wöllmer, of Berlin, for "Setting millstones."—5 years.—Dated 22nd October, 1861.
22. Johann Erdmann Partick, of Chemnitz, for "An improved ironing bell heated by means of gas or spirits of wine."—5 years.—Dated 15th November, 1861.
23. I. Mittelhaus, of Berlin, for "A button set of teeth."—5 years.—Dated 4th November, 1861.
24. L. Schwarzkopff, of Berlin, for "A caloric engine."—5 years.—Dated 15th November, 1861.
25. Gagstädter and Son, of Chemnitz, for "Improvements in harnesses of Jacquart looms."—5 years.—Dated 15th November, 1861.
26. Stanislaus Vigoureux, of Rheims, represented by Böhme, Dresden, for "A process for obtaining mixed yarns."—5 years.—Dated 21st November, 1861.
27. Guido Bartky, of Geithayn, for "A portable cork machine."—5 years.—Dated 14th November, 1861.
28. Carl Friedrich Schellenberg, of Chemnitz, and Carl August Rühling, of Steinpleis, for "A combing card."—5 years.—Dated 15th November, 1861.
29. Friedrich Wilhelm Höpfner, of Berlin, for "A mashing process for the manufacture of spirits of wine and yeast."—5 years.—Dated 25th November, 1861.
30. George Edmund Donisthorpe, of Leeds, represented by Böhme, Dresden, for "Improvements in sizing, drying, and warping yarns for weaving."—5 years.—Dated 29th November, 1861.
31. Giovanni Batista Neglost, of London, represented by Prillwitz, of Berlin, for "Improvements in guns."—5 years.—Dated 14th November, 1861.

* For the Saxon Patent Law, see No. 236 of this Journal.
† All the published Specifications are deposited in the free Library of the Commissioners of Patents, where translations of the same may be had.

32. L. Blumenthal, of Berlin, for "A washing machine."—5 years.—Dated 20th November, 1861.

33. Wilhelm Müller, and Eduard Wald, of Ziclenzig, near Frankfort-on-the-Oder, for "An apparatus for drying wool and other fibrous substances."—5 years.—Dated 20th November, 1861.

34. F. A. Weigel, of Berlin, for "A means of preventing the incrustation of boilers."—5 years.—Dated 11th December, 1861.

35. C. C. Merkel, of Chemnitz, for "An apparatus for regulating and equalizing cards of worsted."—5 years.—Dated 29th November, 1861.

36. Winkler and Co., of Buchholz, for "New and peculiar crinolines."—5 years.—Dated 28th December, 1861.

37. G. Hohendahl, of Friedrichshall, Wurtemberg, for "A parachute for mines."—5 years.—Dated 31st December, 1861.

38. Edward E. Kilbourn and Joseph A. Kilbourn, of Norfolk, U. S., represented by Herrman Böhme, Dresden, for "Improvements in machines for knitting stockings."—5 years.—Dated 31st December, 1861.

39. Winckler and Co., of Buehholz, for "A peculiar fabric of horse-hair."—5 years."—Dated 31st December, 1861.

40. Dobson and Barlow, of Manchester, represented by Prillwitz, Berlin, for "Improvements in cards."—5 years.—Dated 31st December, 1861.

41. Rudolph Adam, of Chemnitz, for "A machine for soling boots and shoes."—5 years.—Dated 31st December, 1861.

42. Johann Carl Zimmermann, of Freiberg, for "Apparatus for removing and utilizing injurious vapours of metallurgical works.—5 years.—Dated 27th December, 1861.

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2267	2*s*. 2*d*.	Mennons, M. A. F.—(*A communication from J. F. Regis-Laporte.*)—Lace.
2268	1*s*. 5*d*.	Mennons, M. A. F.—(*A communication from L. A. Carteron.*)—Paper pulp.
2269	1*s*. 11*d*	Clay, W. W.—Knitting machinery.
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B. WOODCROFT.

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Applications for Letters Patent.

(*29th and 30th April and 1st May*, 1862.)

1244. William Taylor Glidden, of the state of Massachusetts, of the United States of America, for an invention of "A new and useful mode of restoring phosphatic guano."—A communication to him by Louis Harper, now residing at Brooklyn, in the state of New York.—Complete specification.—Dated 29th April, 1862.

1245. George Robert Samson, of 8, Old Chapel Row, Kentish Town, in the county of Middlesex, for an invention of "Improvements in valves or cylinders for wind musical instrments."—Dated 29th April, 1862.

1246. Henry Fox Wells, Engineer, of Woodland House, Prospect Row, Woolwich, in the county of Kent, for an invention of "Cramps for joiners and other work."—Dated 29th April, 1862.

1247. John William Caley and Frederick Goodman Caley, of the firm of Caley, Brothers, of New Windsor, in the county of Berks, Silk Mercers, for an invention of "An improved textile fabric."—Dated 29th April, 1862.

1248. James Eglinton Anderson Gwynne, of Essex Street Wharves, Strand, in the county of Middlesex, Engineer, for an invention of "Improvements in machinery for lifting, forcing, and exhausting, and in the application of the same."—Dated 29th April, 1862.

1249. Rufus E. Dixon, of the city and state of New York, United States of America, for an invention of "A smoker's pipe and tobacco pouch."—Dated 29th April, 1862.

1250. Samuel Wilmott Newington, of Gondhurst, in the county of Kent, Surgeon, for an invention of "Improved apparatus for letting-off and stopping the flow of liquids from casks and vessels, such apparatus forming a tap and substitute for the ordinary vent peg."—Dated 29th April, 1862.

1251. Edwin Clark, of 24, Great George Street, Westminster, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in arches."—A communication to him from abroad by Johann Fillanger, of Landstrasse, 355, Vienna, in the empire of Austria.—Dated 29th April, 1862.

1252. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in preserving animal and vegetable substances."—A communication to him from abroad by Mr. Jules Réné Lion, of 29, Boulevart St. Martin, Paris.——Dated 29th April, 1862.

1253. John Ross, of South Parade, Brompton, and of 53, Chancery Lane, both in the county of Middlesex, Millwright, for an invention of "Improvements in grinding stones or surfaces for grinding grain and other substances."—A communication to him from abroad by Charles Ross, of Stapleton, state of New York, United States of America.—Dated 29th April, 1862.

1254. Richard Bright, of Bruton Street, in the city of Westminster, Lamp Manufacturer, for an invention of "Improvements in lamps and in apparatuses for lighting Argand and other wicked lamps."—Dated 29th April, 1862.

1255. John Cliff, of the Imperial Potteries, Lambeth, in the county of Surrey, Manufacturer, for an invention of "Improvements in insulators for supporting telegraph wires."—Dated 29th April, 1162.

1256. William Littell Tizard, of Mark Lane, in the city of London, Engineer, for an invention of "Improvements in heating, cooling, and condensing apparatuses.—Dated 29th April, 1862.

1257. David Monroe Childs, of No. 481, New Oxford Street, in the county of Middlesex, Engineer, for an invention of "Improvements in

steam engines."—A communication to him from abroad by James M. Ray, John H. Redstone, and Albert E. Redstone, of Indianapolis, in the state of Indiana, one of the United States of America.—Dated 29th April, 1862.

1258. David Monroe Childs, of No. 481, New Oxford Street, in the county of Middlesex, Engineer, for an invention of "Improvements in reaping and mowing machines."—A communication to him from abroad by James M. Ray, John H. Redstone and Albert E. Redstone, of Indianapolis, in the state of Indiana, one of the United States of America.—Dated 29th April, 1862.

1259. David Monroe Childs, of No. 481, New Oxford Street, in the county of Middlesex, Engineer, for an invention of "Improvements in the means of changing a rotary into a reciprocating and a reciprocating into a rotary movement in machinery."—A communication to him from abroad by James M. Ray, John H. Redstone, and Albert E. Redstone, of Indianapolis, in the state of Indiana, one of the United States of America.—Dated 29th April, 1862.

1260. Edward Brown Wilson, of Number 5, Parliament Street, Westminster, in the county of Middlesex, Engineer, for an invention of "An improvement in the machinery or apparatus used in the manufacture of malleable iron and steel."—Dated 29th April, 1862.

1261. William Edward Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in machinery for picking, burring, and cleaning wool and other fibrous substances."—A communication to him from abroad by Calvin Luther Goddard, of New York city, United States of America.—Dated 29th April, 1862.

1262. William Edward Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the construction of mowing and reaping machines."—A communication to him from abroad by Louis Adolphe Faure, of Rue St. Sébastien, Paris, in the empire of France.—Dated 29th April, 1862.

1263. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatuses for aerating liquids, and in fastenings for the said apparatuses and for other articles."—A communication to him from abroad by Etienne Sébastien François, of 33, Boulevard Saint Martin, Paris, France.—Dated 29th April, 1862.

1264. Edward Moore, of Tewkesbury, in the county of Gloucester, for an invention of "Improvements in the manufacture of dress shirts and dresses."—Dated 30th April, 1862.

1265. Alfred Travis, Foreman, and Benjamin Travis, Mechanic, both of Dukinfield, in the county of Chester, for an invention of "Improvements in engines for carding cotton and other fibrous materials."—Dated 30th April, 1862.

1266. Arthur Irwin Mahon, of 25, Leinster Square, Rathmines, in the county of Dublin, Engineer, for an invention of "Improvements in projectiles."—Dated 30th April, 1862.

1267. John Harrington, of Birmingham, in the county of Warwick, Photographic Artist, and Thomas Perkins, of Birmingham aforesaid, Lime Merchant, for an invention of "An improvement or improvements in mounting photographic portraits for visiting cards and in mounting photographs in general."—Dated 30th April, 1862.

1268. George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "An electric apparatus applicable to various useful purposes."—A communication to him from abroad by François Ferdinand Auguste Achard, of Paris, Engineer.—Dated 30th April, 1862.

1269. George Davies, of No. 1, Serle Street, Lincoln's Inn, in the county of Middlesex, and No. 28, St. Enoch Square, in the city of Glasgow, Civil Engineer and Patent Agent, for an invention of "Improvements in the manufacture of nails, screws, and other analogous articles in malleable cast iron."—A communication to him from abroad by Ernest Lambert, of Paris, Engineer.—Dated 30th April, 1862.

1270. Achille Tranquille Mercier, of the town of Louviers, in the department of the Eure, in the empire of France, Engineer, for an invention of "Improvements in weaving looms."—Dated 30th April, 1862.

1271. James Maiden, of Waterloo, near Ashton-under-Lyne, in the county of Lancaster, Smith, for an invention of "Improvements in safety lamps."—Dated 30th April, 1862.

1272. Evan Leigh, of the city of Manchester, in the county of Lancaster, Mechanical Engineer, for an invention of "Improvements in the construction of ships and floating batteries, in mounting their guns, and in the application of steam power, parts of which improvements are also applicable to land batteries and forts."—Dated 30th April, 1862.

1273. Thomas Piatti, of 76, Rue St. Louis au Batignolles, in Paris, in the empire of France, for an invention of "Improvements in the propulsion of ships and other vessels, and in the means and apparatus employed for this purpose."—Dated 30th April, 1862.

1274. Henry Hickman, of No. 2, Miller Place, Park Road, Dalston, London, Gentleman, for an invention of "The more securely fastening of ladies' crinoline skirts and other articles of wearing apparel, and also for the fastening of elastic and other bands."—Dated 30th April, 1862.

1275. James Oxley, of Garden Street, Sheffield, in the county of York, Manufacturer, for an invention of "Improvements in apparatus for cutting and chopping bread and other substances."—Dated 30th April, 1862.

1276. George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for an invention of "Improvements in the construction of couches or settees for the purpose of sitting, lying, or reclining upon."—A communication to him from abroad by Mr. Charles Henry Ferdinand Leroux, Merchant, of Paris, in the empire of France.—Dated 30th April, 1862.

1277. John Money Carter, of Monmouth, for an invention of "Improvements in harness and the shafts of carriages."—Dated 30th April, 1862.

1278. Alexander Prince, of the Office for Patents, No. 4, Trafalgar Square, Charing Cross, in the county of Middlesex, for an invention of "A new composition for casting to represent marble."—A communication to him from abroad by Johann Philipp Weimar, Sculptor, resident at Berlin, in the kingdom of Prussia.—Dated 30th April, 1862.

1279. Werner Staufen, of George Street, Portman Square, in the county of Middlesex, for an invention of "A new material to be used in the manufacture of brushes, and also applicable to the purposes for which bristles, horse hair, and human hair are now used."—Dated 30th April, 1862.

1280. James Lee Norton, of Belle Sauvage Yard, Ludgate Hill, in the city of London, for an invention of "Improvements in apparatus for drying fibrous materials and yarns."—Dated 30th April, 1862.

1281. James Murdoch Napier, of the York Road, Lambeth, in the county of Surrey, for an invention of "Improvements in machinery for manufacturing projectiles."—Dated 30th April, 1862.

1282. Alfred Henry Fielden, of No. 35, Castle Street, Holborn, in the city of London, Commercial Traveller, for an invention of "Improvements in show jars, lamps, signals, and light-houses, and other methods of illumination to be called the 'Rainbow light.'"—Dated 30th April, 1862.

1283. Henry Fowler Broadwood, of Great Pulteney Street, in the county of Middlesex, Pianoforte Maker, for an invention of "Improvements in the construction of pianofortes."—Dated 30th April, 1862.

1284. Henry Willis, of Albany Street, Regent's Park, in the county of Middlesex, Organ Builder, for an invention of "Improvements in valves for the supply and discharge of gaseous bodies."—Dated 30th April, 1862.

1285. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in lamps."—A communication to him from abroad by Samuel Holmes, of New York city, United States of America.—Dated 30th April, 1862.

1286. William Thomas Loy, of Rood Lane, in the city of London, for an invention of "Improved machinery or apparatus for carding cotton and other fibrous substances of a similar character."—A communication to him from abroad by Alphonse Rycx the younger, of Rue de la Porte de Bruges, Ghent, Belgium.—Dated 30th April, 1862.

1287. James Swallow, of Heckmondwike, in the county of York, Manufacturer, and James Allinson, of the same place, Weaver, for an invention of "Improvements in the manufacture of carpet fabric."—Dated 1st May, 1862.

1288. William Bickford Smith, of Camborne, in the county of Cornwall, Merchant, and William Bennetts, of Tucking Mill, in the county of Cornwall, Engineer, for an invention of "Improvements in the method of, and apparatus for, preventing the injurious effects occasioned by smoke, sulphur, and the deleterious gases which escape from stacks, chimneys, calcining houses, chemical and other furnaces."—Dated 1st May, 1862.

1289. Charles Pierre Alexandre Douchain, of St. Cloud, in the empire of France, Engineer, for an invention of "Improvements in apparatus for letting in or shutting off water or other liquids."—Dated 1st May, 1862.

1290. Thomas Holmes, of No. 15, Princess Terrace, Saint Mark's, Regent's Park, in the county of Middlesex, and of No. 22, John Street, Edgeware Road, in the same county, Bootmaker, for an invention of "An improvement in the manufacture of military cartouches, portmonaies, courier bags, letter bags, knapsacks, and other articles of a like nature."—Dated 1st May, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

360. To Gustav Lindemann, of Manchester, in the county of Lancaster, Engineer, for the invention of "Improvements in applying gas for the purpose of singeing or dressing yarns or threads and woven fabrics, and for obtaining heat for other purposes."

On his petition, recorded in the Office of the Commissioners on the 11th day of February, 1862.

451. To Emil Moritz Stoehr, of the city of Manchester, Merchant, for the invention of "Improvements in the manufacture of manganese, and in the combinations of manganese with other metals."—A communication to him from abroad by Oscar Eugen Prieger, Doctor of Medicine, and Ferdinand Carl Prieger, both of Schloss Gereuth, near Ebern, in the kingdom of Bavaria.

On his petition, recorded in the Office of the Commissioners on the 20th day of February, 1862.

710. To William Turner, of The Steam Bakery, No. 39, Hockley, in the town and county of the town of Nottingham, Baker and Flour Dealer, for the invention of "Improvements in the construction of bakers' ovens, and in the use of furnaces and other apparatus connected therewith, and in the means or appliances employed therein."

On his petition, recorded in the Office of the Commissioners on the 14th day of March, 1862.

714. To Constantine Nicolaus Kottula, of Bell Isle, in the county of Middlesex, Soap Manufacturer, for the invention of "Improvements in the manufacture of combined soaps."

On his petition, recorded in the Office of the Commissioners on the 15th day of March, 1862.

729. To William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, for the invention of "Improvements in the manufacture of crinolines."—A communication to him from abroad by Jules Libert, of the firm of Libert and Company, of Boulogne-sur-Mer, in the empire of France.

On his petition, recorded in the Office of the Commissioners on the 17th day of March, 1862.

901. To James Moore Clements, of Birmingham in the county of Warwick, Tailor and Draper, for the invention of "Certain improvements in sewing machines for performing the various kinds of work necessary in stitching, button and eyelet-hole working, embroidering, and sewing generally."

On his petition, recorded in the Office of the Commissioners on the 31st day of March, 1862.

911. To William Turner, of The Steam Bakery, No. 39, Hoekley, in the town and county of the town of Nottingham, Baker and Flour Dealer, for the invention of "Improvements in machinery or apparatus employed in the manufacture of dough, and especially of fermented dough."

On his petition, recorded in the Office of the Commissioners on the 1st day of April, 1862.

938. To William Helme, of Caldbeek, in the county of Cumberland, for the invention of "Improvements in firelighters."

939. And to Robert Morton, Engineer and Brass Founder, Stockton-on-Tees, for the invention of "Improvements in refrigerators or apparatus for cooling liquids, parts of which improvements are also applicable to distillation, surface condensation, heating air for blast furnaces, and other similar purposes."

On both their petitions, recorded in the Office of the Commissioners on the 3rd day of April, 1862.

956. To Thomas Silver, of Philadelphia, in the United States of North America, now residing at No. 20, Bury Street, St. James', in the county of Middlesex, for the invention of "Improvements in governors for regulating the speed of steam and other engines."

On his petition, recorded in the Office of the Commissioners on the 4th day of April, 1862.

1010. To James Bullough, Manufacturer, and John Bullough, Machinist, both of Baxenden, near Accrington, in the county of Lancaster, for the invention for "Improvements in looms for weaving."

On their petition, recorded in the Office of the Commissioners on the 9th day of April, 1862.

1021. To Daniel Fryer, of Carlton Square, Old Kent Road, county of Surrey, and William James Williams, of Arundel Street, Strand, London, county of Middlesex, Gentleman, for the invention of "Improvements in the method of and apparatus for letting on and cutting off the supply of gas to groups or districts of street and other lamps from a central point or depôt."

1038. And to Andrew Trimen, of No. 9, Adam Street, Adelphi, London, in the county of Middlesex, for the invention of "The protection and solidification of magnesian limestone and other stones, and for the prevention of the passage of water through the same."

On both their petitions, recorded in the Office of the Commissioners on the 10th day of April, 1862.

1054. To Joseph Bunnett, of Deptford, in the county of Kent, Engineer, for the invention of "Improvements in revolving shutters, and in machinery for producing the same."

On his petition, recorded in the Office of the Commissioners on the 12th day of April, 1862.

1070. To John Dargue, of 63, Cobden Street, Lister Hills, Bradford, in the county of York, for the invention of "Improvements in machinery for preparing and combing wool and other fibrous materials."

On his petition, recorded in the Office of the Commissioners on the 14th day of April, 1862.

1079. To Jacob Taylor, of Lyon Mill, Oldham, in the county of Lancaster, Cotton Spinner, for the invention of "Improvements in machinery or apparatus for preparing cotton or other fibrous materials to be spun."

1080. To Thomas Harper Bennett, of Winchester House, Southwark, in the county of Surrey, Hat Manufacturer, for the invention of "Improvements in the manufacture of hats, caps, or other coverings for the head."

1081. To Francois Alexandre Le Mat, of New Orleans, in the United States of America, Colonel Aide-de-camp, and Charles Frederic Girard, of Washington, in the United States of America, Doctor of Medicine, for the invention of "Improvements in the construction of revolving and repeating firearms, part of which invention is also applicable to other arms."

1082. To Richard Roche, of Southsea, in the county of Hants, Lieutenant Royal Navy, for the invention of "An improvement in gun carriages."

1083. To Charles Rogers Heap, of Great George Street, in the city of Westminster, Agent, for the invention of "An improved construction of railway chair."—A communication to him from abroad by Antonio Gabrielli, now residing at Turin, in the kingdom of Italy.

1085. To George Bedson, of Manchester, in the county of Lancaster, Manager, for the invention of "Improvements in the manufacture of wire ropes, and in the preparation of wire for such manufacture."

1086. To John Platt, of Oldham, in the county of Lancaster, Mechanical Engineer, and William Cheetham, of Moscow, in the empire of Russia, but now residing at Oldham aforesaid, Manager, for the invention of "Improvements in looms for weaving."

1087. To John Platt, of Oldham, in the county of Lancaster, and William Richardson, of the same place, Mechanical Engineers, for the invention of "Improvements in machinery or apparatus for cleaning wool and other hairs of animals from burrs and other foreign matters."

1088. To Richard Atkinson Peacock, of St. Helier, in the Island of Jersey, Civil Engineer, for the invention of "Improvements in constructing

and working lock gates for docks, harbours, canals, and navigable rivers."

1089. To WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in ornamenting fabrics and other surfaces."—A communication to him from abroad by Messrs. Eugène Siess, Calico Printer, and Charles Prosper Coindreau, Merchant, both of 29, Boulevart St. Martin, Paris.

1091. To FERDINAND CARL PHILIPPSON, of Münzstrasse, Berlin, in the kingdom of Prussia, for the invention of "Improvements in steam hammers."—A communication to him from abroad by Louis SchwartzKopff, a person residing at Chausséetrasse, Berlin aforesaid.

1092. To JAMES CROSSDALE, of No. 2, Rotherfield Street, Islington, in the county of Middlesex, Boot Maker, for the invention of "Certain improvements in boots and shoes for ventilating same."

1093. And to RUPERT RAINS, of No. 4, Crescent, Bridge Street, Blackfriars, in the county of Middlesex for the invention of "Improvements in apparatus for freezing, cooling, and churning."—A communication to him from abroad by Georges Toselli, of No. 174, Faubourg Saint Martin, Paris, in the empire of France.

On their several petitions, recorded in the Office of the Commissioners on the 15th day of April, 1862.

1094. To STEPHEN BARRETT, Machinist, of No. 8, Clifton Street, Finsbury, in the county of Middlesex, for the invention of "Improvements in projectiles."

1095. To FREDERIC NEWTON GISBORNE, of No. 3, Adelaide Place, London Bridge, in the city of London, Engineer and Electrician, for the invention of "Improvements in the construction of electric targets for rifle and gun practice."

1097. To JOHN BARBOUR, of Liverpool, in the county of Lancaster, Merchant, for the invention of "Improvements applicable to upholsterers' and other hand hammers."—A communication to him from abroad by William Thomson, of the firm of Thomson and Burns, of the city of Toronto, in Canada."

1098. To WALTER FERGUSON LOCK, of Haylands, near Ryde, in the Isle of Wight, Esquire, for the invention of "An elongated projectile to be shot from smooth bored ordnance, and which shall retain during its flight the longer axis in the direction of its line of flight similarly to elongated projectiles propelled from rifled ordnance."

1099. To JOHN WILSON HADWEN, of Kebroyd Mills, in the parish of Halifax, in the county of York, Cotton Spinner and Manufacturer, for the invention of "Improvements in the treatment and application of soft silk waste."

1100. To DAVID STOTT, of the firm of John Whiteley and Son, of Firth House Mills, Stainland, in the county of York, Paper Manufacturers, for the invention of "Improvements in the manufacture of rings from paper, millboard, or pasteboard, applicable for steam or other pipe joints, bobbin ends, or other purposes, and in the means or apparatus employed therein, which are also applicable to the manufacture of rings from other flexible substances."

1101. To JAMES MACKAY, of Liverpool, in the county of Lancaster, Timber Merchant, for the invention of "Certain improvements in projectiles for fire arms."

1102. To JOHN MARTIN ROWAN, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in manufacturing articles of cast steel."

1103. To ROBERT COCHRAN and ROBERT COCHRAN, junior, of Paisley, in the county of Renfrew, North Britain, Manufacturers, for the invention of "Improvements in producing ornamental fabrics."

1104. To FREDERIC PELHAM WARREN, of East Court, Cosham, in the county of Hants, Commander in the Royal Navy, for the invention of "Improvements in apparatus for steering sea-going vessels."

1105. To MATTHEW CARTWRIGHT, of St. John's Row, Hoxton, in the county of Middlesex, Dentist, for the invention of "Improvements in the manufacture of models, and of plates or pieces for artificial teeth, and in combining or amalgamating india rubber and gutta percha with metals for the manufacture of artificial plates or pieces, and for other purposes."

1106. To WILLIAM JOHN MARSDEN, of Sheffield, in the county of York, for the invention of "Improvements in eye-shades."

1107. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "An improvement in setting artificial teeth."—A communication to him from abroad by David Steinberg, of the city and county of San Francisco, United States of America.

1108. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the manufacture of cannon and other ordnance, and of solid and hollow cylinders for shafting and other purposes of wrought iron or steel, or both combined."—A communication to him from abroad by David Tomlinson Yeakel, of Lafayette, state of Indiana, United States of America.

1109. To JOHN STANTON, of Birmingham, in the county of Warwick, Engine Fitter, for the invention of "Improvements in apparatus or machinery to be used in stamping or piercing metal washers and other similar articles."

1111. To JOHN ASHBURY, of Manchester, in the county of Lancaster, Contractor, for the invention of "Improvements in the permanent way of railways."

1112. To JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in railway and common road carriages."—A communication to him from abroad by Claude Marie Bathias, of Paris, in the empire of France.

1113. To JOHN WILLIAM FORD, of Shooters Hill, in the county of Kent, for the invention of "Improvements in sewing machines."—A communication to him from abroad by Gordon McKay, of Boston, and Robert Henry Mathies, of Manchester, both in the United States of America.

1114. And to JOHN WESTON, of 80, Upper Whitecross Street, St. Luke's, in the county of Middlesex, Engineer, for the invention of "Improvements in machinery for morticing, drilling, and dove-tailing, and in tools to be used therewith."

On their several petitions, recorded in the Office of the Commissioners on the 16th day of April, 1862.

1115. To CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, for the invention of "Improvements in the manufacture and production of the chromates and the bichromates of potash and of soda."—A communication to him from abroad by Louis Alexandre Taillandier, Chemist, of Argenteuil, in the empire of France.

1117. To VICTOR FLEURY, of No. 23, Rue de la Paix, in the city of Paris, in the empire of France, Clockmaker, for the invention of "Improvements in clocks and other time keepers."

1118. To WILLIAM HODGSON HUTCHINSON, of Bury, in the county of Lancaster, Starch Manufacturer, for the invention of "Improvements in the manufacture of ammonia or its salts, and cyanogen or its compounds, from refuse gluten."

1119. To JOHN GRIFFITHS, of Liverpool, in the county of Lancaster, Civil Engineer, for the invention of "Improvements in propelling ships and other navigable vessels."

1120. To WILLIAM HARLING, JOHN MATTHEW TODD, and THOMAS HARLING, all of Burnley, in the county of Lancaster, Machine Makers, for the invention of "Improvements in looms for weaving."

1121. To FREDERICK TOLHAUSEN, Patent Agent, 17, Faubourg Montmartre, Paris, in the empire of France, for the invention of "An improved machine for making bricks, tiles, and the like articles."—A communication from Victor Duprat, a person resident at Canéjan, in the department de la Gironde, France.

1122. To JAMES MURPHY, senior, of Glasgow, in the county of Lanark, North Britain, Pattern Designer, for the invention of "Improvements in looms."

1123. To JOHN PUGH TEMPERLEY, of the Soho Iron Works, Bolton-le-Moors, in the county of Lancaster, Engineer, for the invention of "Improvements in the air pumps of steam engines."

1125. To JEAN LOUIS PERIN, Engineer, residing at No. 97, Rue du Faubg. St. Antoine, Paris, for the invention of "Improvements in machinery for mortising wood."

1126. To HENRY GARDNER, of Leeds, in the county of York, Manufacturer, for the invention of "Improvements in machinery for breaking and preparing flax and other fibrous substances."

1127. To CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agent, for the invention of "Improvements in the manufacture and production of certain alloys containing cadmium."—A communication to him from abroad by Henri Catherine Camille de Ruolz and Anselme Louis Marie Fontenay, both residing at Paris, in the empire of France.

1128. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in taps and valves."—A communication to him from abroad by Jean Antoine Clement, Antoine Crozy, and André Morateur, of 23, Boulevard de Strasbourg, Paris, France.

1129. To RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in buffing apparatuses and in draw-springs."—A communication to him from abroad by Richard Dover Chatterton, of Coburg, Canada West.

1130. To WILLIAM ANDERSON, of 85, Shaftsbury Street, in the county of Middlesex, Engineer, for the invention of "Improvements in tubular steam generators."

1133. To WILLIAM CLARK, of 23, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for the invention of "Improvements in the manufacture of railway rails."—A communication to him from abroad by Jean Baptiste Delrieu, of 29, Boulevart St. Martin, Paris, Metallurgist.

1134. To JOSEPH CEDRIC RIVETT, of Prestolee New Mills, Farnworth, in the county of Lancaster, Cotton Spinner, and JOHN MUIR HETHERINGTON, of Manchester, in the said county, Machine Maker, for the invention of "Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning."

1135. And to RALPH WEDGWOOD, of Barnes, in the county of Surrey, Gentleman, for the invention of "Improved apparatus for facilitating the saving of life in cases of fire."

On their several petitions, recorded in the Office of the Commissioners on the 17th day of April, 1862.

1136. To ROBERT DENNISON, of Lancaster, in the county of Lancaster, Joiner, for the invention of "Improvements in reaping and mowing machines."

1137. To EDWIN DOVE, of Hunter Street, in the county of Middlesex, Gentleman, for the invention of "Improvements in matches and fuzees, and apparatus for containing and igniting the same."

1138. To JOSEPH SCOTT PHILLIPS, Major H.M.'s I.R. List, of No. 10, College Crescent, Finchley Road, in the county of Middlesex, for the invention of "A new method and apparatus for the propulsion of vessels through the water."

1139. To JOHN SHANKS, of Barrhead, in the county of Renfrew, North Britain, Plumber, for the invention of "Improvements in apparatus for promoting ventilation, also applicable to drying stoves."

1140. To MOSES MASTERS, of New Kent Road, in the county of Surrey, Artificial Hand and Leg Manufacturer, for the invention of "Improvements in artificial legs."

1141. To RICHARD STUART and GRAHAM STUART, Spindle and Flyer Manufacturers, and HENRY HILL, Bookkeeper, all of Sheffield, in the county of York, for the invention of "Improvements in fastening flyers upon spindles."

1142. To BENJAMIN RHODES, of Old Ford Road, Bow, in the county of Middlesex, for the invention of "Improvements in the machinery for, and in the

method of making, as also in the materials to be employed in the manufacture of cylinders, tubes, and other vessels from paper and other materials or fabrics."

1144. To Benjamin Browne, of No. 52, King William Street, in the city of London, Civil Engineer and Patent Agent, for the invention of "Improvements in breech-loading fire-arms."—A communication to him from abroad by Felix Célestin Palis, of 15, Place de la Bourse, Paris, in the French empire, Directeur du Bureau de Traduction.

1145. To Edward Loysel, of Cannon Street, in the city of London, Civil Engineer, for the invention of "Improvements in locks and fastenings."

1146. To William Rose, of Hales Owen, in the county of Worcester, Manufacturer, for the invention of "Improvements in the manufacture of tubes, more especially applicable to the barrels of fire-arms and ordnance."

1147. To Alexander Parkes, of Liverpool Street, Birmingham, in the county of Warwick, for the invention of "Improvements in the manufacture of rollers for surface printing and embossing."

1148. To Alfred Nicholson Wornum, of Store Street, in the county of Middlesex, for the invention of "Improvements in pianofortes."

1150. And to Henry Lumley, of Chancery Lane, in the county of Middlesex, Auctioneer, for the invention of "An improved rudder."

On their several petitions, recorded in the Office of the Commissioners on the 19th day of April, 1862.

1154. To John Pickard, Engineer, and Thomas Morris, Broker, both of Preston, in the county of Lancaster, for the invention of "Improvements in furnaces for the prevention or consumption of smoke."

1156. To Sandiforth Featherstone Griffin, of New Adelphi Chambers, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the construction of vessels of war and batteries on land."

1158. To Edwin Francis Clarke, of Waterloo, near Liverpool, in the county of Lancaster, Gentleman, for the invention of "Improvements in propellers for steam ships and other vessels."

1159. To Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for the invention of "Improvements in jackets or protectors for covering metal and other surfaces to prevent loss of heat by radiation."—A communication to him from abroad by Charles Louis Ruquois, residing at Marseilles, France.

1160. To Frederick Tolhausen, C.E. and Patent Agent, of 17, Faubourg Montmartre, Paris, France, but now residing at No. 100, Fleet Street, London, for the invention of "An improvement in horse-shoes."—A communication to him from abroad by Paul-Eugène Clément, Esq., a person resident at St. Amand (Marne), France.

1161. To Thomas Attwood, of Lewes, in the county of Sussex, Ironmonger, for the invention of "Improvements in kitcheners."

1164. To James Chapman Amos, of the firm of Easton Amos and Sons, of the Grove, Southwark, in the county of Surrey, Engineer, for the invention of "An improved mode of and improvements in apparatus for supplying surface condensers with water, part of which improvements is applicable to blowers and rotary pumps generally.

1165. And to Christopher Crabb Creeke, of Bournemouth, in the county of Hants, Architect and Surveyor, for the invention of "Improvements in the construction of drain and other pipes."

On their several petitions, recorded in the Office of the Commissioners on the 21st day of April, 1862.

1170. To Charles Webster, of Park Steps, Ilkeston Road, Radford, in the county of Nottingham, Locksmith, for the invention of "Improvements in self-acting fountains adapted for garden engines, fire engines, and for raising and forcing water from mines, wells, and other places."

1171. To Arthur Warner, of Threadneedle Street, in the city of London, Merchant, for the invention of "Improvements in the construction of vessels of war and in floating or other batteries."

1172. To John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for the invention of "Improvements in apparatus for propelling and manœuvring ships."—A communication to him from abroad by Jean Pierre Victor Le Rouge and Jacques Henri Charles De Berly, of Paris, in the empire of France.

1173. To George Scoville, of Wood's Hotel, Furnivals Inn, in the city of London, Attorney at Law, for the invention of "Improvements in pistons for steam engines."—A communication to him from abroad by Augustus James Scoville and Augustus Hervey De Clercq, of Bloomington, Illinois, United States of America.

1174. And to Robert Boby, of Bury St. Edmunds, in the county of Suffolk, Agricultural Implement Maker, for the invention of "Improvements in the construction of apparatus for rolling or crushing land."

On their several petitions, recorded in the Office of the Commissioners on the 22nd day of April, 1862.

1176. To Luke Holden, of Burnley, in the county of Lancaster, Saddler, for the invention of "Certain improvements in harness for animals of draught and burden."

1180. To William Carpenter, of Greenwich, in the county of Kent, Printer, for the invention of "An improved method of printing in colours."

1182. To Alexander Robertson, of 22, Bachelor's Walk, in the city of Dublin, Surgical Instrument Maker, and Richard Barter, of St. Annes, Blarney, in the county of Cork, Ireland, Doctor of Medicine, for the invention of "Improvements in apparatus for distributing and projecting fluids either for surgical, sanatory, or domestic purposes."

1186. To George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for the invention of "Improvements in the construction of elliptic springs for wheel carriages and other purposes."—A communication to him from abroad by the inventor Jabez Marshall

Woodward, a person resident at Brooklyn, in the county of Kings and state of New York, in the United States of America.

1188. To WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "An improved fertilizing composition."—A communication to him from abroad by John McAuley Gallacher, of Roxbury, county of Norfolk, Massachusetts, United States of America.

1190. And to CHARLES EDWIN HEINKE, of 79, Great Portland Street, in the county of Middlesex, Submarine Engineer, for the invention of "Improvements in diving helmets, dresses, and apparatus, parts of which improvements may also be employed for extinguishing fires in ships and other confined places."

On their several petitions, recorded in the Office of the Commissioners on the 23rd day of April, 1862.

1194. To JOHN BOND, of Burnley, in the county of Lancaster, Machine Maker, for the invention of "Certain improvements in projectiles, which improvements are applicable to horns attached to vessels for war purposes."

1196. To JOHN WINSBORROW, of No. 4, Samson Terrace, Marlborough Road, Dalston, in the county of Middlesex, Gas Meter Maker, for the invention of "Improvements in wet gas meters."

1198. To JOSEPH ADOLPHE TRAVERSIER, of 2, Rue Sainte Appoline, Paris, France, and of 4, South Street, Finsbury, London, for the invention of "Some improvements in making ladies' bonnets."

1200. To GEORGE WASHINGTON BELDING, of No. 7, King Street, Cheapside, in the city of London Gentleman, for the invention of "Improvements in harrows or cultivators."—A communication to him from abroad by Willis Churchill, of Newark, in the state of New Jersey, United States of America, Machinist.

1202. To ROBERT MUSHET, of Coleford, in the county of Gloucester, Metallurgist, for the invention of "An improvement or improvements in the lining, repairing, or 'fettling' of puddling furnaces."

1204. And to RUDOLF ZIMARA, of St. Petersburg, in the empire of Russia, Engineer, for the invention of "Improvements in stoves for heating and ventilating buildings."

On their several petitions, recorded in the Office of the Commissioners on the 24th day of April, 1862.

Invention protected for Six Months by the Deposit of a Complete Specification.

NOTICE is hereby given, that the petition of

1244. WILLIAM TAYLOR GLIDDEN, of the state of Massachusetts, United States of America, praying for Letters Patent for the invention of "A new and useful mode of restoring phosphatic guano," — a communication to him by Louis Harper, now residing at Brooklyn, in the state of New York, — was deposited and recorded in the Office of the Commissioners on the 29th day of April, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Patents Sealed.

List of LETTERS PATENT which passed the Great Seal on the

2nd May, 1862.

2775. WILLIAM HALL, of Calais, in the empire of France, Lace Manufacturer, for an invention of "Improvements in the production of curved and other forms in articles of lace."—Dated 5th November, 1861.

2777. RICHARD FETHNEY, of the city of Manchester, in the county of Lancaster, Machinist, for an invention of "Improvements in machinery or apparatus for preparing, spinning, or doubling cotton, silk, and other fibrous materials, parts of which improvements are applicable for winding and other purposes."—Dated 5th November, 1861.

2779. EDWARD BOWRA, of Upper Norwood, in the county of Surrey, for an invention of "Improvements in the manufacture of elastic fabrics."—Dated 5th November, 1861.

2780. JOHN BERESFORD LOVE, of Philadelphia, in the state of Pennsylvania, in the United States of America, for an invention of "Improvements in the mode of combining together and securing to the sides of navigable vessels and water-batteries armour plates of iron or steel."—Dated 5th November, 1861.

2783. HENRY ORTH, of Wissembourg, in the empire of France, Merchant, for an invention of "An improved soap."—Dated 5th November, 1861.

2787. ALEXANDER PRINCE, of the Office for Patents, 4, Trafalgar Square, Charing Cross, in the county of Middlesex, for an invention of "Improvements in furnaces for reducing zinc-ores."—A communication to him from abroad by Adolphe Charlier, Director General of the Mines and Foundries of Eschweiler, resident at Stolberg, near Aix-la-Chapelle, in the kingdom of Prussia.—Dated 6th November, 1861.

2789. FREDERICK HILLS SCHRÖDER, of Hampstead, in the county of Middlesex, Gentleman, for an invention of "Improvements in evaporating, and in machinery employed therein."—Dated 6th November, 1861.

2794. ALEXANDER WILLIAM WILLIAMSON, of University College, Gower Street, in the county of Middlesex, for an invention of "Improvements in the construction of steam boilers."—Dated 7th November, 1861.

2799. JOHN HANCOCK, of the town of Nottingham, Hosier, for an invention of "Improvements in the manufacture of looped fabrics, and in machinery to be employed therein."—Dated 7th November, 1861.

2816. SAM HAGUE, of Westwinsted, Litchfield county, in the state of Connecticut, America, but having a temporary residence in the town and county of the town of Nottingham, Cutler, for an invention of "Improvements in the manufacture of hoes, adzes, or other similar articles."—Dated 9th November, 1861.

2817. JOHN FISHER, of Carrington, near Nottingham, Lace Manufacturer, for an invention of "Improvements in apparatus for indicating or regulating the passing of railway trains."—Dated 9th November, 1861.

2844. Louis Francois Duval and Louis André Beaudet, at Paris, 33, Boulevard St. Martin, town in the Freneh empire, for an invention of "A new proeess of tanning."—Dated 12th November, 1861.

2845. Michael Henry, of 84, Fleet Street, in the eity of London, Patent Agent, for an invention of "An improvement in and eomposition for treating iron and steel, and artieles manufaetured thereof."—A communieation to him from abroad by Alphouse Muller de la Mothe, of 33, Boulevart Saint Martin, Paris, France.—Dated 12th November, 1861.

2848. John Hodgkinson, of Bolton, in the county of Lancaster, Cotton Spinner, and Daniel Greenhalgh, of the same place, Manager, for an invention of "Improvements in maehinery or apparatus for preparing cotton, eotton-waste, or other fibrous materials to be spun."—Dated 13th November, 1861.

2854. Thomas Procter, of Boston, in the county of Lincoln, Millwright, for an invention of "Improvements in earriers or stackers, or apparatus for facilitating the staeking of straw, hay, or agricultural produee."—Dated 13th November, 1861.

2875. John Nixon, of Cardiff, county of Glamorganshire, for an invention of "Improvements in apparatus for ventilating eoal or other mines or other underground excavations."—Dated 15th November, 1861.

2883. Jonathan Charles Goodall, of 12, Great College Street, Camden Town, and John Beale, of East Greenwieh, for an invention of "Improvements in maehinery for folding envelopes."—Dated 16th November, 1861.

2902. James Hemingway, of Robert Town, in the county of York, Artist, for an invention of "Improvements in maehinery or apparatus to be used in the working 'winning,' or mining of coal, elay, shale, and other minerals or earthy matters."—Dated 19th November, 1861.

2945. John Henry Johnson, of 47, Lineoln's Inn Fields, in the county of Middlesex, and of 166, Buehanan Street, in the eity of Glasgow, North Britain, Gentleman, for an invention of "Improvements in toothed wheels, and in the apparatus used in their manufaeture."—A eommunieation from abroad by Jean Baptiste Buissart and Therese Leome Levesque, both of Paris, in the empire of France.—Dated 23rd November, 1861.

2990. William Clark, of 53, Chaneery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in the elasps or fastenings of purses, bags, portfolios, tobaeeo pouehes, and other like artieles."—A communieation to him from abroad by Mr. Joseph Sehoenfeld, of 29, Boulevart St. Martin, Paris, in the empire of Franee, Leather Case Manufacturer.—Dated 27th November, 1861.

3029. James Burrows, of Wigan, and Joseph Dougan, of Haigh, in the county of Lancaster, Engineers, for an invention of "Certain improvements in winding or driving drums or pulleys."—Dated 3rd Deeember, 1861.

3127. Eduard Claude Barbotte de Beaulieu, of Avallon, in the department of Yonne, in the empire of France, for an invention of "Improvements in the manufaeture of spirituous liquors, and in apparatus employed therein."—Dated 13th Deeember, 1861.

3142. Eduard Claude Barbotte de Beaulieu, of Avallon, in the department of Yonne, in the empire of Pranee, for an invention of "Improvements in apparatus for extraeting eoal dust from auriferous sands."—Dated 14th Deeember, 1861.

355. William Lyall, of Amiens, in the departement de la Somme, France, for an invention of "Improvements in maehinery for preparing flax, hemp, and other fibrous substanees."—Dated 11th February, 1862.

405. William Avery, of the firm of James and Sons, of Birmingham, in the eounty of Warwiek, Screw Manufaeturers, for an invention of "Improvements in maehinery for the manufaeture of serews, a part or parts of whieh improvements may also be used in the manufaeture of pins, rivets, and nails."—Dated 15th February, 1862.

509. John Imray, of 65, Westminster Bridge Road, Lambeth, in the eounty of Surrey, Engineer, for an invention of "Improvements in hinges."—Dated 25th February, 1862.

Notice of Application for Leave to enter a Disclaimer.

Notice is hereby given that Charles Bradlaugh, late of Elysium Villas, Park, Tottenham, in the eounty of Middlesex, now of 12, St. Helen's Place, in the eity of London, Gentleman, assignee of Letters Patent, for the invention of "Improvements in the eonstruction of eollapsable framework of wood or iron, whieh may be employed for forming portable bedsteads, houses, parts of houses, or bridges and other similar structures, whieh may oeeasionally be required to be removed from plaee to place with faeility, economy, and despateh," dated 29th January, 1853, has applied to Her Majesty's Commissioners of Patents for leave to enter a Diselaimer of certain parts of the Speeifieation of said invention. Any person intending to oppose such applieation must give notiee of such intention at the Chambers of Her Majesty's Attorney General, No. 1, Paper Buildings, Temple, within ten days from the date hereof.—Dated this 25th day of April, 1862.

Montague R. Leverson,
12, St. Helen's Place, E.C.,
Agent for said Charles Bradlaugh.

Errata in Journal of 29th April, 1862.

No. 1208. For "No. 12, Caroline Street," read "No. 2, Caroline Street."

No. 1226. For "trains" read "trams."

Patents which have become Void.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 50*l*., before the Expiration of the Third Year from the date of such Patents, pursuant to the Act of the 16 Vict., c. 5, sec. 2, for the week ending the 26th day of April, 1862.

992. Quin Beck, of the firm of James Meharg and Co., of Belfast, in the county of Antrim, Manufacturers, for an invention of "Improvements in stoves."—A communication to him from abroad by James Cherry, of Vermont, U.S.—Dated 20th April, 1859.

993. Job Wotton, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in raising or shaping metals."—Dated 20th April, 1859.

994. John Morris Johnson and Edmund Johnson, of Castle Street, Holborn, for an invention of "Improvements in the production of ornamental surfaces suitable for advertisement tablets, plates for shop fronts, and for other uses."—Dated 20th April, 1859.

995. Alexander William Williamson, of University College, for an invention of "Improvements in obtaining extracts from the liquorice root."—Dated 20th April, 1859.

1003. John Alison, of Hainault Forest, Essex, Gentleman, for an invention of "An improved instrument for extirpating thistles, docks, and other deep rooted weeds."—Dated 21st April, 1859.

1004. John Davies, of Tetbury, in the county of Gloucester, Machinist, for an invention of "A new or improved apparatus for ringing door bells, and a bolt to be used with the said apparatus and for other purposes to which the said bolt is or may be applicable."—Dated 21st April, 1859.

1005. David Auld, of Glasgow, in the county of Lanark, North Britain, Engineer, for an invention of "Improvements in machinery or apparatus for supplying steam boilers with water."—Dated 21st April, 1859.

1007. Edwin Lewthwaite, of Halifax, in the county of York, Clock and Watch Maker, and George Ambler, of Queenshead, near Halifax aforesaid, Clock and Watch Maker, for an invention of "Improvements in clocks, watches, chronometers, and other time keepers."—Dated 21st April, 1859.

1009. George Roberts and John Bridges, of No. 20, Ponsonby Place, Vauxhall Bridge Road, in the county of Middlesex, for an invention of "Improvements in the manufacture of candles."—Dated 21st April, 1859.

1014. Charlotte Mansel, of Plymouth, in the county of Devon, for an invention of "A folding travelling case."—Dated 23rd April, 1859.

1017. James Gillies, of Glasgow, in the county of Lanark, North Britain, Wood Turner, for an invention of "Improvements in branding or marking wood for casks, barrels, and other purposes."—Dated 23rd April, 1859.

1018. John Angus, of Glasgow, in the county of Lanark, North Britain, Saddlers' Ironmonger, for an invention of "Improvements in saddles."—Dated 23rd April, 1859.

1019. William Dicks, of Leicester, Boot Manufacturer, and William Hopwell, also of Leicester, Machinist, for an invention of "Improvements in machinery for making screws, and applying them in fixing the soles of boots and shoes."—Dated 23rd April, 1859.

1023. William Gibson, of St. Leonard's Road, in the county of Middlesex, Engineer, for an invention of "Improvements in steering apparatus."—Dated 23rd April, 1859.

1024. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "An improvement in the manufacture of woollen cloth."—A communication to him by Louis Victor Lemaignen, residing at Lisieux, France.—Dated 23rd April, 1859.

1026. William Moxon, of Parliament Street, in the city of Westminster, Contractor, and Joseph Jeffrey Bennett, of Homer Terrace, Victoria Park, in the county of Middlesex, Civil Engineer, for an invention of "Improved apparatus for raising or lifting and lowering heavy bodies."—Dated 23rd April, 1859.

1028. William Stevenson, of Johnstone, in the county of Renfrew, North Britain, Manager to George Houstoun and Company, for an invention of "Improvements in spinning, doubling, and manufacturing cotton and other fibrous materials."—Dated 25th April, 1859.

1030. James Higgin, in the city of Manchester, in the county of Lancaster, Manufacturing Chemist, for an invention of "Improvements in treating madder and plants of the same family, and preparations therefrom."—Dated 25th April, 1859.

1035. James Holmes, of Street, Somerset, Accountant, for an invention of "Improvements in applying eyelet holes to boots and shoes, and in binding boots and shoes."—Dated 25th April, 1859.

1036. Augustus William Gadesden, of 56, Leman Street, Goodman's Fields, for an invention of "Improvements in producing solutions of sugar."—Dated 25th April, 1859.

1038. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in sewing machines."—A communication to him from abroad by Robert Halsted Morford and Anthony Denton Morford, of New York.—Dated 25th April, 1859.

1039. Henry Columbus Hurry, of Wolverhampton, in the county of Stafford, Civil Engineer, for an invention of "Improved means of and apparatus for obtaining motive power."—Dated 25th April, 1859.

1042. Thomas Holt, of Lower Place, in the parish of Rochdale, and county of Lancaster, Engineer, and John Brown, of Oxford Street, Well Field, in the same parish and county, Agent, for an invention of "Improvements in apparatus or an improved apparatus for heating water for the supply

of steam boilers, which improvements or apparatus are also applicable in some cases for the prevention of incrustation in steam boilers."—Dated 26th April, 1859.

1043. Herbert Allman, of Mornington Place Hampstead Road, London, Consulting Engineer, for an invention of "Certain improvements in the construction of window blind mountings, and in apparatus connected therewith."—Dated 26th April, 1859.

1044. William Mackenzie, Publisher, of Glasgow, county Lanark, Scotland, for an invention of "An improved method of printing impressions upon an enlarged or reduced scale either from engraved plates, electrotypes, blocks, drawings, or other surfaces."—Dated 26th April, 1859.

1045. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the manufacture of nitric acid and its application for the production of artificial nitrons or nitric salts."—A communication to him from abroad by Madame Lefebvre, of Paris, in the empire of France.—Dated 26th April, 1859.

1048. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Patent Agent, for an invention of "Improvements in vulcanizing and coloring caoutchouc, and in the preparation of caoutchouc paints and colors."—A communication to him from abroad by Theophile Julien Laballe, of Paris.—Dated 26th April, 1859.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 100*l.*, before the Expiration of the Seventh Year from the date of such Patents, pursuant to the Act of the 16 Vict., c. 5, sec. 2, for the week ending the 26th day of April, 1862.

892. William Hadfield, of the city of Manchester, Spinner and Manufacturer, for an invention of "Certain improvements in looms for weaving."—Dated 21st April, 1855.

913. James Hunter and George Hunter, both of Leysmill, in the county of Forfar, Engineers, for an invention of "Improvements in stone cutting machinery."—Dated 24th April, 1855.

916. Matthew Andrew Muir, of Glasgow, in the county of Lanark, North Britain, Machinist, for an invention of "Improvements in the manufacture or moulding of railway chairs."—Dated 24th April, 1855.

923. James Wallace, junior, of Glasgow, in the county of Lanark, North Britain, Manufacturer, for an invention of "Improvements in bleaching, washing, or cleansing textile fabrics and materials."—Dated 25th April, 1855.

946. William Shears, of Bankside, Southwark, for an invention of "An improvement in cases or magazines for gunpowder or other explosive preparations or compounds."—Dated 26th April, 1855.

FOREIGN PATENTS.



SAXONY.*

List of Patents Delivered during the First Quarter of 1862.†

(*Communicated by the Saxon Government.*)

(For preceding List, see No. 868 of this Journal.)

1. Friedrich Ehregott Woller, of Stollberg, near Chemnitz, for "Improvements in circular looms for the manufacture of hose."—5 years.—Dated 2nd January, 1862.

2. Fritz and Theodor Hurtzig, of Linden, near Hanover, for "Manufacture of a hard, white, or coloured composition from caoutchouc, gutta-percha, and other similar substances, being a substitute for ivory, bones, horn, ebony, &c."—5 years.—Dated 7th January, 1862.

3. Jung and Must, of Halle on the Saale, for "A continuous centrifugal machine for mixing substances."—5 years.—Dated 11th January, 1862.

4. Johann Gottfried Schöne, of Grossröhrsdorf, for "Improvements in power-looms for weaving girths."—5 years.—Dated 11th January, 1861.

5. Eugenio Vincenzi, of Parma, represented by Herrmann Böhme, Dresden, for "An electrical signal apparatus."—5 years.—Dated 13th January, 1862.

6. Richard Hartmann, of Chemnitz, for "Improvements in power-looms."—5 years.—Dated 11th January, 1862.

7. Joseph Harrison, of Philadelphia, represented by Prillwitz, Berlin, for "Improvements in steam-boilers."—5 years.—Dated 13th January, 1862.

8. Johann Carl Zimmermann, of Freiberg, for "Apparatus for removing and utilizing injurious vapours of metallurgical works."—5 years.—Dated 27th December, 1861.

9. Julius Kizitaff, of Manchester, represented by Prillwitz, Berlin, for "An hydro-oxigene retort."—5 years.—Dated 13th January, 1862.

10. Joseph Harrison, of Philadelphia, represented by Prillwitz, Berlin, for "An apparatus for preventing the incrustation of steam-boilers."—5 years.—Dated 13th January, 1862.

11. Joseph Harrison, of Philadelphia, represented by Prillwitz, Berlin, for "A steam-tight closing of boilers, pipes, &c."—5 years.—Dated 13th January, 1862.

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* For the Saxon Patent Law, see No. 236 of this Journal.

† All the published Specifications are deposited in the free Library of the Commissioners of Patents, where translations of the same may be had.

12. J. Casiraghi, of Chemnitz, for "Improvements in power-looms."—5 years.—Dated 4th January, 1862.

13. Carl Lehmann, of Cossmannsdorf, for "An apparatus for obtaining and utilizing the waste fibres in reducing rags into paper-pulp."—5 years.—Dated 1st February, 1862.

14. Hippolyte Leplay, of Avignon, and Jules François Joseph Cuisinier, of Francières, represented by Böhme, of Dresden, for "A process for reviving animal charcoal."—5 years.—Dated 17th February, 1862.

15. Samuel Bateman, of Lowmoore, represented by Prillwitz, Berlin, for "Improvements in machines for the manufacture of mountings of cards."—5 years.—Dated 22nd January, 1862.

16. Wilhelm Matthes, jun., of Chemnitz, for "Manufacture of imitation of crochet work made on looms by employing gauze."—5 years.—Dated 12th February, 1862.

17. J. M. Ottenheimer and Sons, of Stuttgart, for "Improvements in looms for weaving stays."—5 years.—Dated 18th February, 1862.

18. Johann Baptist Schalkenbach, of Treves, for "A piano orchestra, and arrangements belonging thereto."—5 years.—Dated 6th March, 1862.

19. Franz Vester, of Pforzheim, for "A process for strengthening soles of shoes."—5 years.—Dated 7th March, 1862.

20. Melchior Nolden, of Frankfort-on-the-Maine, represented by Prillwitz, Berlin, for "A machine for husking corn."—5 years.—Dated 14th March, 1862.

21. Julius Hofmann, of Döbeln, for "Improvements in lime-kilns."—5 years.—Dated 18th March, 1862.

22. Glockner, Brothers, of Tschirndorf, for "A peculiar fire and cooking apparatus."—5 years.—Dated 12th March, 1862.

23. Jacques Bélou, of Paris, represented by G. A. Ostertag, Dresden, for "Improvements in caloric engines.—5 years.—Dated 22nd March, 1862.

24. Paul Käuffer, of Dresden, for "A process for applying superheated steam."—5 years.—Dated 22nd March, 1862.

25. Julius Tittelbach, of Leipzic, for "A ventilating crystal chandelier."—5 years.—Dated 18th March, 1862.

26. Edmund Thode and Knoop, of Dresden, for "A method of sizing or preparing yarn.—5 years.—Dated 24th March, 1862.

27. Carl Voigt, of Halle, for "A centrifugal mixing machine."—5 years.—Dated 6th March, 1862.

28. Rich. Hartmann, of Chemnitz, for "A break and warp-motion for power looms."—5 years.—Dated 26th March, 1862.

29. L. C. Lamarki and C. D. Dittmarsch, of Vienna, for "Improvements in the manufacture of playing cards."—5 years.—Dated 6th March, 1862.

In course of Publication, by Order of the Commissioners of Patents.

ABRIDGMENTS (in Classes, and Chronologically arranged) of all SPECIFICATIONS of PATENTED INVENTIONS, from the earliest enrolled to those published under the Act of 1852.

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Preparation of Fuel, and Apparatus for its Combustion.
Steam Engines.

B. Woodcroft.

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THE

COMMISSIONERS OF PATENTS' JOURNAL.

By Authority.

(Registered for transmission abroad.)

No. 870. TUESDAY, MAY 6, 1862. Price 2d.

Applications for Letters Patent.

(2nd, 3rd, and 5th May, 1862.)

1291. William Huntington and Thomas Huntington, of the Victoria Mills, Liverpool, in the county of Lancaster, Millers, for an invention of "Improvements in the machinery for the manufacture of bread."—Dated 2nd May, 1862.

1292. Hermann Kohn, of 29, Unter den Linden, in the city of Berlin, in the kingdom of Prussia, Merchant Tailor, for an invention of "Making any kind of stuffs, textures, or fabrics waterproof."—Dated 2nd May, 1862.

1293. William Bodden and William Mercer, both of the Hargreaves Spindle Works, Oldham, in the county of Lancaster, for an invention of "Improvements in certain parts of machinery for slubbing and roving cotton and other fibrous substances."—Dated 2nd May, 1862.

1294. Thomas Foxall Griffiths, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in raising or shaping sheet iron."—Dated 2nd May, 1862.

1295. Robert Walker, of Glasgow, in the county of Lanark, North Britain, Distiller, for an invention of "Improvements in malting, and in apparatus therefor."—Dated 2nd May, 1862.

1296. Ormrod Coffeen Evans, of 20, Church Street, Old Kent Road, in the county of Surrey, for an invention of "A reversible attachment to a shaft or arbor for converting reciprocating rectilinear into rotary motion."—Dated 2nd May, 1862.

1297. Ormrod Coffeen Evans, of 20, Church Street, Old Kent Road, in the county of Surrey, for an invention of "An abdominal truss, intended for the more perfect support and cure of hernia."—Dated 2nd May, 1862.

1298. Charles Ashwell, of Albany Road, Barnsbury Park, Islington, in the county of Middlesex, for an invention of "An improved safety fastening applicable to the locks of doors."—Dated 2nd May, 1862.

1299. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in apparatuses for superheating steam."—A communication to him from abroad by Pierre Antoine Delafond and Joseph Corrade, both of Marseilles, France.—Dated 2nd May, 1862.

1300. Charles Frederick Whitworth, of Sowerby Bridge, in the county of York, Engineer, for an invention of "Improvements in apparatuses for signalling upon railways."—Dated 2nd May, 1862.

1301. Matthew Paul, of Dumbarton, in the county of Dumbarton, North Britain, Engineer, for an invention of "Improvements in windlasses and capstans or ships' winding apparatus."—Dated 2nd May, 1862.

1302. James Waller Gill, of Woolfardisworthy, Crediton, in the county of Devon, for an invention of "Improved apparatus for turning up and pulverizing the soil of land for cultivation."—Dated 2nd May, 1862.

1303. Henry Welch, of Millwall, in the county of Middlesex, Carpenter, for an invention of "Improvements in securing or attaching armour plates on or to ships or vessels."—Dated 2nd May, 1862.

1304. Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improved electrical apparatus, applicable to the lighting of gas."—A communication to him from abroad by Robert Cornelius, of Philadelphia, United States of America.—Dated 2nd May, 1862.

1305. William Mossman, of No. 1, Cleveland Terrace, Gloucester Road, in the parish of Saint

Mary, Islington, in the county of Middlesex, Manufacturing Stationer, for an invention of "Improvements in the manufacture of bonnets, hats, or coverings for the head."—Dated 3rd May, 1862.

1306. Joseph Brierley, of Blackburn, in the county of Lancaster, Borough Surveyor, for an invention of "Improvements in the construction of fire-plugs or valves to be used in extinguishing fires or for other purposes where water is required to be drawn from mains under pressure."—Dated 3rd May, 1862.

1307. Henri Juhel, of Bordeaux, in the empire of France, Ironmaster, for an invention of "Improvements in wheels."—A communication to him from Mr. Mathurin Rives, of Bordeaux (France).—Dated 3rd May, 1862.

1308. Joseph Tyler, of 5, Kennington Place, Kennington Lane, in the county of Surrey, Professor of Music, for an invention of "Improvements in the manufacture of clarionets."—Complete specification.—Dated 3rd May, 1862.

1309. Edward Omerod, of Manchester, in the county of Lancaster, Engineer, and Christian Schiele, of the same place, Engineer, for an invention of "Improvements in machinery or apparatus for cutting or dressing stones, which are also applicable for hammering, crushing, or otherwise reducing metals, and other materials."—Dated 3rd May, 1862.

1310. Henry George Moffatt, of Dalston, in the county of Middlesex, Designer, for an invention of "An improved advertising medium."—Dated 3rd May, 1862.

1311. Jean Marie Herdevin and Joseph Alexandre Jullien, Ingénieurs, 13, Rue Gaillon, Paris, France, for an invention of "Improvements in sluice cocks."—Dated 3rd May, 1862.

1312. Thomas Snowdon, of Stockton-on-Tees, in the county of Durham, Consulting Engineer, for an invention of "Improvements in the manufacture of steel tyres, hoops, and cylinders, and in furnaces employed therein, and applicable to the melting of steel generally."—A communication to him from abroad by Pierre Mourrier, of Bona, Algeria.—Dated 3rd May, 1862.

1313. John Hortimer Heppel, of 34, Great George Street, Westminster, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in the construction of the permanent way of railways."—Dated 3rd May, 1862.

1314. John Herdman, of Belfast, in the county of Antrim, in Ireland, for an invention of "Improvements in the manufacture of wrought iron, steel, or combined wrought iron and steel plates adapted for ship building and other purposes for which strength and lightness are required."—Dated 3rd May, 1862.

1315. William Black, of Wood Street, Northampton, in the county of Northampton, for an invention of "Improvements in lottery and ballot-boxes."—Dated 3rd May, 1862.

1316. George Neall, of Islington, in the county of Middlesex, for an invention of "Improved apparatus for obtaining and applying motive power."—Dated 3rd May, 1862.

1317. Michael Henry, of 84, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in the process of and apparatus for preparing materials for the manufacture of paper, and in obtaining products from agents used in the said process, part of the invention being also applicable to apparatus for washing."—A communication to him from abroad by Jean Baptiste Vasseur and Xavier Lamotte, both of 33, Boulevard Saint Martin, Paris, France.—Dated 3rd May, 1862.

1318. John Fowler, of Leeds, in the county of York, Engineer, for an invention of "Improvements in engines for hauling agricultural implements."—Dated 3rd May, 1862.

1319. Salvatore Merolla, of Largo Castello, No. 75, Naples, for an invention of "Improvements in fire-arms."—Dated 3rd May, 1862.

1320. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "An improved method of joining boxes."—A communication to him from abroad by Wright Duryea, of New York city, United States of America.—Dated 3rd May, 1862.

1321. James Mellodew and Thomas Mellodew, of Moorside Mills, Oldham, in the county of Lancaster, Manufacturers, and Charles William Kesselmeyer, of Manchester, in the said county, Warehouseman, for an invention of "Improvements in looms for weaving."—Dated 3rd May, 1862.

1322. Charles Schlickeysen, of Berlin, in the kingdom of Prussia, Machinist, for an invention of "Improvements in machinery for moulding bricks, tiles, pipes, and turf."—Dated 3rd May, 1862.

1323. John Heyworth, of Shawforth, near Rochdale, in the county of Lancaster, Overlooker for Messrs. Todd and Lord, for an invention of "Improvements in looms for weaving."—Dated 3rd May, 1862.

1324. Pierre Victrice Lefebvre, of 29, Boulevart St. Martin, Paris, Chemist, for an invention of "A self-feeding pen-inkstand."—Dated 3rd May, 1862.

1325. Alfred Williams, of the borough of New Windsor, in the county of Berks, Schoolmaster, for an invention of "The construction of a backed form or seat capable of being converted into a level table with seat or a desk either level or sloping or at any angle."—Dated 5th May, 1862.

1326. Thomas Parkinson, of Blackburn, in the county of Lancaster, Brassfounder, John Norman the younger, of the same place, Millright, and Richard Cottam, of the same place, Moulder, for an invention of "Certain improvements in the construction of furnaces for steam boilers."—Dated 5th May, 1862.

1327. Louis Guillaume Perreaux, of Paris, in the empire of France, Engineer, for an invention of "Certain improvements in clocks or machines for keeping time."—Dated 5th May, 1862.

1328. Herbert Allman, of Bedford Row, in the county of Middlesex, Civil Engineer, for an in-

vention of "Certain improvements in the construction of apparatus commonly called locks."—Dated 5th May, 1862.

1329. Thomas Wilson, of Birmingham, in the county of Warwick, Engineer and Gun Manufacturer, for an invention of "Improvements in covering ships of war and land batteries with armour plates, and in the construction and steering of ships of war."—Dated 5th May, 1862.

1330. Samson Barnett, of 23, Farston Street, Hoxton, in the county of Middlesex, Engineer, for an invention of "Improvements in helmets for divers."—Dated 5th May, 1862.

1331. Thomas Francis Richard Brindley, of 2, Leonard Square, Finsbury, in the county of Middlesex, for an invention of "Improvements in travelling and other flasks, decanters, bottles, and other necked vessels."—Dated 5th May, 1862.

1332. Christopher Binks, of Parliament Street, Westminster, for an invention of "Improved methods of obtaining hydrogen gas and certain gaseous compounds of hydrogen and of carbon."—Dated 5th May, 1862.

1333. François Marrel, of Marseille, France, Iron Master, for an invention of "Improvements in forming wrought iron bars for the manufacture of armour plates and other articles of forged iron."—Dated 5th May, 1862.

1334. Joseph Victor, of Wadebridge, in the county of Cornwall, Hydraulic Engineer, James Polglase, of Bodmin, in the said county, Mine Agent, and William Rounsevell, of St. Breock, near Wadebridge aforesaid, Carpenter, for an invention of "Improvements in the manufacture of safety fuses for mining and other purposes."—Dated 5th May, 1862.

1335. Robert Burley, of Glasgow, in the county of Lanark, North Britain, Carpenter, for an invention of "Improved arrangements for using ordnance under water, and in part applicable otherwise."—Dated 5th May, 1862.

1336. Robert Bushby, of Little Hampton, in the county of Sussex, for an invention of "Improvements in lifting or lightening ships for entering shallow harbours or docking and other purposes."—Dated 5th May, 1862.

1337. James Roscoe, of Bell Lane, Leicester, for an invention of "An improved lubricator for steam engines."—Dated 5th May, 1862.

1338. Pierre Léon Auguste Théophile Sourbé, of Condom, in the empire of France, for an invention of "Improvements in maturing spirits and wines."—Dated 5th May, 1862.

1339. Edward Brown Wilson, of Number 5, Parliament Street, Westminster, in the county of Middlesex, Engineer, for an invention of "An improvement in the machinery or apparatus used in the manufacture of malleable iron and steel."—Dated 5th May, 1862.

1340. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in steam generators."—A communication to him from abroad by Joseph Harrison, of Philadelphia, in the United States of America, Engineer.—Dated 5th May, 1862.

1341. John Adcock, of Marlborough Road, Dalston, in the county of Middlesex, Mechanician, for an invention of "Improved apparatus for measuring and indicating distances travelled by wheel carriages."—Dated 5th May, 1862.

1342. Benjamin Cooke, of Frathy House, Anthony, Devonport, in the county of Devon, Contractor's Agent, for an invention of "An improved construction of implement for cutting turf."—Dated 5th May, 1862.

Notices to Proceed.

Notice is hereby given, that

3217. John Rosindell, of Mile End, in the county of Middlesex, Brewer, has given notice at the Office of the Commissioners of his intention to proceed with his application for Letters Patent for the invention of "An improved method of and apparatus for separating solid from liquid substances."

As set forth in his petition, recorded in the said office on the 24th day of December, 1861.

3228. And Thomas Simmons, Doctor of Medicine, of Birmingham, in the county of Warwick, and Thomas Timmins, General Caster, also of Birmingham aforesaid, have given the like notice in respect of the invention of "Certain improvements in urns or vessels for holding and supplying hot water, tea, coffee, or other liquids, separately or conjointly, as also in the stands for the same."

3229. And Jabez Jones, of Liverpool, in the county of Lancaster, Lead Merchant, has given the like notice in respect of the invention of "Improvements in the manufacture of lead, tin, and other metals, or amalgamation of metals of a like nature fusible at a low temperature into sheets of any thickness or length, and in the apparatus connected therewith."

3235. And Richard Needham, of Dukinfield, in the county of Chester, Engineer, has given the like notice in respect of the invention of "Improvements in apparatus for cleansing steam boilers and lubricating the pistons of steam engines, and for an improved steam trap."

3237. And Joseph Nottingham Palmer, of Fenchurch Street, in the city of London, has given the like notice in respect of the invention of "Improvements in cooking stoves and ships' ranges."—A communication to him from abroad by John Russell, resident at Sydney, New South Wales.

As set forth in their respective petitions, all recorded in the said office on the 26th day of December, 1861.

3238. And William Hawksworth, of Oldham, in the county of Lancaster, Machine Maker, has given the like notice in respect of the invention of "Certain improvements in carding engines."

3243. And Thomas William Atlee, Druggists' Factor, of Birmingham, in the county of Warwick, has given the like notice in respect of the invention of "Certain improvements in cocks or taps for drawing off fluids."

3247. And Jean Joseph Hector Fajole, of Courbevoie, in the French empire, Gentleman, and Pascal Achille Agostini, of the same place, Doctor of Medicine, have given the like notice in respect of the invention of "An improved composition or improved compositions suitable for painting, varnishing, and coating."

As set forth in their respective petitions, all recorded in the said office on the 27th day of December, 1861.

3250. And Arthur Warner, of Threadneedle Street, in the city of London, has given the like notice in respect of the invention of "Improvements in the manufacture of cases or receptacles for oil fuses and other articles used in the military and naval services."

As set forth in his petition, recorded in the said office on the 28th day of December, 1861.

3258. And John Bellamy Payne, of Chard, in the county of Somerset, Engineer, and Lace Manufacturer, has given the like notice in respect of the invention of "Improved machinery for the manufacture of laid and other twine, lines, ropes, bands, and other cordage, whether made of hemp, flax, or other fibrous substances, or of wire."

As set forth in his petition, recorded in the said office on the 30th day of December, 1861.

3264. And Neil McHaffie, of 16, Summer Street, Mile End, Glasgow, has given the like notice in respect of the invention of "Improvements in ventilators or valves for regulating the passage of air or other fluids whether of a gaseous or liquid form."

3268. And John Haslam, of Preston, in the county of Lancaster, has given the like notice in respect of the invention of "Improved apparatus for winding, holding, and letting go cords, bands, or chains, particularly applicable to window blinds."

As set forth in their respective petitions, both recorded in the said office on the 31st day of December, 1861.

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6. And Thomas Charles Clarke, of Liverpool, in the county of Lancaster, Civil Engineer, has given the like notice in respect of the invention of "Improvements in the construction of apparatus for heating and circulating water and other liquids."

8. And Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, has given the like notice in respect of the invention of "Improvements in shears or scissors, chiefly applicable to be employed in the manufacture of lace."—A communication to him from abroad by Pierre Joseph Henninot and André Carpentier, both of Caudry, France.

11. And Benjamin Rhodes, of Old Ford, Bow, has given the like notice in respect of the invention of "Improvements in forming or making straight and bent pipes and bends for pipes, and also vessels of various shapes, and in coating and protecting objects and articles of various forms, and in the apparatus to be employed therein."

As set forth in their respective petitions, all recorded in the said office on the 1st day of January, 1862.

22. And George Jeffries, of Golden Ball Street, Norwich, Gun Maker, has given the like notice in respect of the invention of "Improvements in breech-loading fire-arms."

As set forth in his petition, recorded in the said office on the 2nd day of January, 1862.

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27. And William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the county of Middlesex, Patent Agent, has given the like notice in respect of the invention of "Improvements in apparatus for dressing, cleaning, or sifting grain."—A communication to him from abroad by Louis Appolinaire Haton, of No. 15, Passage des Petites Ecuries, Paris, in the empire of France, Merchant.

As set forth in his petition, recorded in the said office on the 3rd day of January, 1862.

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64. And Henri Charvet, of Lille, in the departement of the Nord, in the empire of France, Manufacturer, has given the like notice in respect of the invention of "Improvements in the spinning of cotton, and in its various applications."

68. And Benjamin Thompson, of Birmingham, in the county of Warwick, Merchant, has given the like notice in respect of the invention of "Improvements in ordnance and fire-arms, and in projectiles to be used therewith."—A communication to him from abroad by Edward Heaton, of New Haven, in the state of Connecticut, in the United States of America, Gentleman.

As set forth in their respective petitions, both recorded in the said office on the 9th day of January, 1862.

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77. And William Henry Preece, of the town and county of Southampton, Civil Engineer, has given the like notice in respect of the invention of "Improved apparatus for signalling upon railways."

As set forth in his petition, recorded in the said office on the 10th day of January, 1862.

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82. And Henry Charlton, of Birmingham, in the county of Warwick, Merchant and Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of certain kinds of shoes for mules and horses."

As set forth in his petition, recorded in the said office on the 11th day of January, 1862.

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163. And Louis Martin, Chemist, residing in Paris, No. 13, Rue Gaillon, has given the like notice in respect of the invention of "Improvements in the treatment of mineral oils, and in the apparatus connected therewith."

166. And Edmund Pace, of Queen Street, in the city of London, Manufacturer, has given the like notice in respect of the invention of "Improvements in laths for Venetian blinds, in painting such laths, and in raising and lowering Venetian blinds."

As set forth in their respective petitions, both recorded in the said office on the 22nd day of January, 1862.

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710. And William Turner, of the Steam Bakery, No. 39, Hockley, in the town and county of the town of Nottingham, Baker and Flour Dealer, has given the like notice in respect of the invention of "Improvements in the construction of bakers' ovens, and in the use of furnaces and other appa-

ratus connected therewith, and in the means or appliances employed therein."
As set forth in his petition, recorded in the said office on the 14th day of March, 1862.

735. And Brereton Todd, of Bissoe and Perran Smelting Works, near Falmouth, in the county of Cornwall, has given the like notice in respect of the invention of "Improvements in the manufacture of antimony and the oxide of antimony."

736. And William Barford, of the firm of Amies and Barford, of Peterborough, in the county of Northampton, Agricultural Implement Makers, has given the like notice in respect of the invention of "Improvements in rollers for rolling land."
As set forth in their respective petitions, both recorded in the said office on the 17th day of March, 1862.

759. And Frederick Warner, of 8, Crescent, Cripplegate, in the city of London, has given the like notice in respect of the invention of "Improvements in cocks or taps."
As set forth in his petition, recorded in the said office on the 18th day of March, 1862.

776. And Robert Martin Roberts, of Kensington, in the county of Middlesex, Mining Engineer, has given the like notice in respect of the invention of "Improvements in obtaining and applying motive power."
As set forth in his petition, recorded in the said office on the 20th day of March, 1862.

911. And William Turner, of the Steam Bakery, No. 39, Hockley, in the town and county of the town of Nottingham, Baker and Flour Dealer, has given the like notice in respect of the invention of "Improvements in machinery or apparatus employed in the manufacture of dough, and especially of fermented dough."
As set forth in his petition, recorded in the said office on the 1st day of April, 1862.

1003. And John Lawson, one of the partners in the firm of Samuel Lawson and Sons, of the Hope Foundry, Leeds, in the county of York, has given the like notice in respect of the invention of "Improvements in balling cotton and thread."—A communication to him from abroad by Adolphe Alphonse Poullier, a person resident at Lille, in the empire of France.
As set forth in his petition, recorded in the said office on the 8th day of April, 1862.

1012. And William Davies, of Llanelly, Carmarthenshire, South Wales, has given the like notice in respect of the invention of "Improvements in puddling, balling, and reheating furnaces."

1015. And Colin Mather, of Willow Bank, Broughton, near Manchester, in the county of Lancaster, Gentleman, has given the like notice in respect of the invention of "Improvements in spittoons."
As set forth in their respective petitions, both recorded in the said office on the 9th day of April, 1862.

1030. And Henry Deacon, of Appleton House, Appleton, in the county of Lancaster, Alkali Manufacturer, has given the like notice in respect of the invention of "Improvements in the manufacture of caustic soda."
As set forth in his petition, recorded in the said office on the 10th day of April, 1862.

1055. And Nicholas Nussey, of Holbeck, near Leeds, in the county of York, Mechanic, has given the like notice in respect of the invention of "Improvements in machinery or apparatus for preparing and combing wool, flax, hair, cotton, silk, and other fibrous materials."
As set forth in his petition, recorded in the said office on the 12th day of April, 1862.

1065. And Frederick Tolhausen, Civil Engineer and Patent Agent, of No. 17, Rue du Faubourg Montmartre, Paris, in the empire of France, has given the like notice in respect of the invention of "A telegraphic dial printing apparatus."—A communication from Jean Baptiste Rousse and Henry Vivès, two persons resident at No. 17, Rue du Faubourg Montmartre aforesaid.
As set forth in his petition, recorded in the said office on the 14th day of April, 1862.

1101. And James Makay, of Liverpool, in the county of Lancaster, Timber Merchant, has given the like notice in respect of the invention of "Certain improvements in projectiles for fire arms."

1113. And John William Ford, of Shooter's Hill, in the county of Kent, has given the like notice in respect of the invention of "Improvements in sewing machines."—A communication to him from abroad by Gordon McKay, of Boston, and Robert Henry Mathies, of Manchester, both in the United States of America.
As set forth in their respective petitions, both recorded in the said office on the 16th day of April, 1862.

1244. And William Taylor Glidden, of the state of Massachusetts, of the United States of America, has given the like notice in respect of the invention of "A new and useful mode of restoring phosphatic guano."—A communication to him by Louis Harper, now residing at Brooklyn, in the state of New York.
As set forth in his petition, recorded in the said office on the 29th day of April 1862.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days next after the date of the Gazette [and of the Journal] in which this notice is issued.

Notice of Application for Prolongation.

NOTICE is hereby given that WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, and RICHARD MARCH HOE, of the city of New York, in the United States of America, Engineer, Press Maker, Machinist and Saw Maker, intend to apply by petition, under the 4th section of the statute 5th and 6th William 4th, chapter 83, and the 7th and 8th Victoria, chapter 69, to Her Majesty in Council, for a Prolongation of the term of sole using and vending an invention of "Certain improvements in machinery for letter press printing," granted to the said William Edward Newton, by Letters Patent bearing date at Westminster the 18th day of July, in the 12th year of the reign of Her present Majesty Queen Victoria. And notice is hereby further given, that the said William Edward Newton and Richard March Hoe, intend to apply by Counsel to the Judicial Committee of the Privy Council, on the 9th day of June now next, or if the said Judicial Committee shall not sit on that day, at the then next sitting of the said Judicial Committee, for a time to be fixed for hearing the matter of their said petition, and that on or before the said 9th day of June next notice must be given of any opposition intended to be made to the said petition, and any person intending to oppose the said application must lodge a caveat against the granting of such application at the Council Office on or before that date.—Dated this 1st day of May, 1862.

BOWER, SON, and COTTON,
46, Chancery Lane,
Solicitors for the said
William Edward Newton and Richard March Hoe.

Patents Sealed.

LIST of LETTERS PATENT which passed the Great Seal on the

6th May, 1862.

2797. THEODORE SCHWARTZ, of the city and state of New York, United States of America, for an invention of "Improvements in the construction of air engines or air motors."—Dated 7th November, 1861.

2798. HENRY GOULD GIBSON, of Mark Lane, in the city of London, Merchant, for an invention of "Improvements in apparatuses for drying hops, malt, grain, and other vegetable substances, part of which is applicable as a fan or blower."—A communication to him from abroad by Joseph Perrigault, of Rennes, France.—Dated 7th November, 1861.

2801. JOHN BARROW, of the Dalton Chemical Works, West Gorton, near Manchester, for an invention of "Improvements in the manufacture of benzole, naptha, napthaline, aniline, and carbolic acid."—Dated 7th November, 1861.

2809. JOHN BYRNE, of Whitehouse, in the county of Antrim, Flaxdresser, for an invention of "Improvements in machinery or apparatus for scutching and refining flax, hemp, jute, and other fibrous substances."—Dated 8th November, 1861.

2811. DAVID COWAN, of Hungerford Street, Strand, in the county of Middlesex, Manufacturer, for an invention of "Improvements in the construction of pneumatic subaqueous tubes for passenger or goods traffic, and in machinery for the manufacture thereof."—Dated 9th November 1861.

2813. GEORGE SIMPSON, of Glasgow, in the county of Lanark, North Britain, Mining Engineer, for an invention of "Improvements in boring apparatus, such as is used for mining purposes."—Dated 9th November 1861.

2814. ROBERT MCNAIR, of Glasgow, in the county of Lanark, North Britain, Machinist, for an invention of "Improvements in casings for stitching machines, and in adapting the same for writing."—Dated 9th November 1861.

2819. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent, for an invention of "Improvements in obtaining alkaline phosphates."—A communication to him from abroad by Edouard Aubertin, of Paris, France.—Dated 9th November 1861.

2825. FRANCIS O'REILLY, of Shaw Street, in the city of Dublin, Ireland, for an invention of "A new or improved table or apparatus for tailors to work at without sitting."—Dated 9th November, 1861.

2827. DAVID YOOLOW STEWART, of Glasgow, in the county of Lanark, North Britain, Ironfounder, for an invention of "Improvements in the manufacture of cast-iron pipes and similar articles, and in apparatus to be used therein."—Dated 11th November, 1861.

2833. CHAUNCY ORRIN CROSBY, of New Haven, Connecticut, in the United States of America, but now residing at Bridge Street, Blackfriars, in the city of London, Gentleman, for an invention of "Improvements in the manufacture of pointed trimming, and in the machinery for manufacturing pointed trimming."—Dated 11th November, 1861.

2847. THOMAS BUTTERWORTH COLLINGWOOD, Manager, and ABRAHAM BUTTERWORTH, Overlooker, both of Rochdale, in the county of Lancaster, for an inventionof "Improvements in throstle and doubling frames for spinning and doubling fibrous materials."—Dated 13th November, 1861.

2851. EDWARD CURTIS KEMP, of Avon Place, Pershore Road, Birmingham, in the county of Warwick, Agent, for an invention of "Improvements in gas lamps, glasses, and other fittings."—Dated 13th November, 1861.

2928. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in rotary engines."—A communication from abroad by John Benjamin Root, of New York City, in the United States of America.—Dated 21st November, 1861.

2989. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman, for an invention of "Improvements in mowing and reaping machinery."—A communication to him from abroad by William Van Anden, of New York, in the United States of America.—Dated 27th November, 1861.

3222. Thomas Edward Vickers, of Sheffield, in the county of York, Steel Manufacturer, for an invention of "Improvements in the wheels of railway engines and carriages, and in the machinery or apparatus to be used in making the same."—Dated 24th December, 1861.

528. Edwin George Bruzaud, of Pembroke Road, Kensington, in the employ of Messrs. Erard and Company, of 18, Great Marlborough Street, Harp and Pianoforte Manufacturers, for an invention of "Improvements in pianofortes."—Dated 26th February, 1862.

567. Joseph Bradlee Kendall, of Boston, in the state of Massachusetts, United States of America, for an invention of "An improved horse shoe."—Dated 1st March, 1862.

583. Henry Bunning, of Field House, New Cross, Deptford, in the county of Kent, for an invention of "Improvements in the manufacture of lubricating grease or compounds."—Dated 3rd March, 1862.

587. Bridge Standen, of Salford, near Manchester, in the county of Lancaster, Chymist, for an invention of "Improvements in the preparation or manufacture of portable manure or fertilising compound, and in the collection or extraction therefrom of a certain liquid applicable to various purposes, and also in machinery or apparatus to be employed therein."—Dated 4th March, 1862.

Patents on which the Stamp Duty of £50 has been Paid, and Dates of their Production for Certificate.

(*To 3rd May*, 1862, *inclusive.*)

28th April.

1067. Robert Harrington, Watch Maker, of No. 3, Collonade, Albany Road, in the parish of Camberwell, county of Surrey, for an invention of "Improvements in umbrellas and parasols."—Dated 28th April, 1859.

1090. Charles Hanson Greville Williams, of 39, Regent Square, Gray's Inn Road, in the county of Middlesex, for an invention of "Improvements in the manufacture of colouring matters and in applying the same for dyeing and printing fabrics and materials."—Dated 30th April, 1859.

1111. Lyman Reed Blake, of the state of Massachusetts, of the United States of America, for an invention of "A new and useful or improved machine for sewing a sole on a boot or shoe."—Dated 3rd May, 1859.

29th April.

1075. William McIntyre Cranston, of No. 11, New Broad Street, London, Agent, for an invention of "A grass cutting machine."—A communication to him from abroad by Walter Abbot Wood, of Hoosick Falls, county of Rensselaer, state of New York, America.—Dated 29th April, 1859.

1083. Joseph Toussaint, of No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, for an invention of "A new process of modelling and moulding for galvanoplastic."—Dated 30th April, 1859.

1085. Edward Francis, of Wrexham, in the county of Denbigh, Grocer, for an invention of "Improved apparatus applicable to the treatment of tea and other useful purposes."—Dated 30th April, 1859.

1182. Henry Clarke, of Wakefield, in the county of York, Corn Factor, for an invention of "Improvements in balancing mill stones to the running as well as to the standing state."—A communication from abroad by Thomas Narburgh, of St. Louis, Missouri, North America.—Dated 11th May, 1859.

30th April.

1092. Thomas Hall Arrowsmith, of Bolton, in the county of Lancaster, Cotton Spinner, for an invention of "Improvements in carding-engines."—Dated 2nd May, 1859.

1109. William Sellers, of Philadelphia, in the state of Pennsylvania, United States of America, Engineer and Machinist, for an invention of "Improved machinery for making screw bolts and nuts."—Dated 3rd May, 1859.

2nd May.

1095. William Bayliss, of the firm of W. and N. Bayliss and Co., Flat and Chain Cable and Iron Hurdle and Fencing Manufacturers, of Monmore Green, Wolverhampton, in the county of Stafford, for an invention of "Improvements in the manufacture of iron hurdles and fencing."—Dated 2nd May, 1859.

1106. Thomas William Miller, of Her Majesty's Dock Yard, in the parish of Portsea, in the county of Southampton, for an invention of "Improvements in apparatus for and mode of generating steam and economising fuel."—Dated 3rd May, 1859.

1115. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "An improvement in the manufacture of cast steel."—Dated 3rd May, 1859.

1123. Joseph Felix Allender, of Bricrley Hill, in the county of Stafford, Manager of Works, and Daniel Rowley, of Brierley Hill aforesaid, Iron Roller, for an invention of "Improvements in shears for cutting boiler plates and sheets, and for other like purposes."—Dated 5th May, 1859.

3rd May.

1150. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "Improvements in puddling iron and steel."—Dated 7th May, 1859.

1151. Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist, for an invention of "Improvements in the manufacture of iron."—Dated 7th May, 1859.

1173. George Bell, of Wandsworth, in the county of Surrey, Manufacturer, for an invention of "Improvements in matches or fusees."—Dated 10th May, 1859.

Patents on which the Stamp Duty of £100 has been Paid, and Dates of their Production for Certificate.

(*To 2nd May*, 1862, *inclusive.*)

28th April.

975. William Hartley, of Bury, in the county of Lancaster, Engineer, for an invention of "Improvements in safety valves and in apparatus connected therewith, applicable also to regulating the flow of steam for other purposes."—Dated 1st May, 1855.

30th April.

986. Henry Lee, the younger, of Lambeth, in the county of Surrey, Contractor, and John Gilbert, of Hackney Road, in the county of Middlesex, Engineer, for an invention of "Certain machinery for mixing the substances used in the formation of concrete and other like substances."—Dated 2nd May, 1855.

2nd May.

988. Marie Amédie Charles Mellier, of 47, Rue de Seine, St. Germain, Paris, for an invention of "An improvement in the manufacture of paper."—Dated 2nd May, 1855.

FOREIGN and COLONIAL PATENT LAWS and RULES, being translations or copies of Official Communications, may be found in the following Numbers of this Journal, published at 2*d.* each, or 3*d.* free by post:—

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Roman States, No. 319.
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Spain, No. 323.
Sweden, Nos. 327 and 354.
Tasmania, No. 860.
United States of America, Nos. 638, 646, and 789.
Victoria, Nos. 186 and 359.
Wurtemberg, No. 314.

PATENTS BECOME VOID, &c.—The following are the numbers of this Journal in which have appeared the Quarterly Lists of Patents become Void by reason of the non-payment of the Stamp Duty of £50 before the expiration of the third year:—

No. of Journal.	Periods embraced by the Lists.	
234 -	A.D. 1852—October to December	inclusive
247 -	A.D. 1853—January to March	,,
268 -	,, April to June	,,
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321 -	,, October to December	,,
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789 -	,, April to June	,,
815 -	,, July to September	,,
842 -	,, October to December	,,

The following are the like numbers in which have appeared the Quarterly Lists of Patents become Void by reason of the Non-payment of the additional Stamp Duty of £100 before the expiration of the Seventh Year:—

632 -	A.D. 1852—October to December	inclusive
660 -	A.D. 1853—January to March	,,
684 -	,, April to June	,,
712 -	,, July to September	,,
737 -	,, October to December	,,
761 -	A.D. 1854—January to March	,,
789 -	,, April to June	,,
815 -	,, July to September	,,
842 -	,, October to December	,,

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A List of the Letters Patent for Inventions which have become Void by reason of the Nonpayment of the additional Stamp Duty of £50 before the expiration of the Third Year from the date of such Patents, pursuant to the Act of the 16th Vict. c. 5, sec. 2,—for the Quarter ending the 31st day of March, 1862.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
1	1st Jan., 1859.	John Talbot Pitman, of the American and European Patent Offices, No. 67, Gracechurch Street, London.	An improved mode of making and fitting bungs to casks and other vessels.
4	„	Benoît Joseph Gosteau, of 2, Rue Sainte Appoline, Paris, in the empire of France, and of 45, Essex Street, Strand, London, Merchant.	An improved gridiron, which may form a complete cooking apparatus.
7	„	John Oliver, of White Bank, near Chesterfield, in the county of Derby.	Improvements in lubricators for steam engine cylinders.
12	„	Pierre Emmanuel Guérinot, of 60, Boulevart de Strasbourg, Paris, Mechanician Jeweller.	Improvements in the application of an apparatus to railway locomotives, waggons, and carriages for the purpose of lessening the effect of concussion in the event of collision.
13	„	William Eccles, of 34, Surry Street, Strand, Westminster, in the county of Middlesex, and of the University of Cambridge, Master of Arts.	Improving the machinery or apparatus for regulating the tension of the twist threads or warp whilst it is weaving in power looms into cloth.
18	„	Isaac Wood, of Charing Cross - -	Improvements in cutting and finishing corks, and in machinery used for such purposes.
19	„	George Skinner, of Stockton-on-Tees, county of Durham, Earthenware Manufacturer, and John Whalley, of South Stockton-on-Tees, county of York, Earthenware Manufacturer.	Improvements in the manufacture of ornamental and other tiles and other similar articles.
21	„	George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey.	Improvements in machinery for forming dough into cakes or bread crackers.
22	„	Alexandre Louis Lévèque, of Paris, France, Gentleman.	An improved apparatus for subduing or stopping run-away or restive horses.
23	„	Joseph Bond Morgan, of Liverpool, in the county of Lancaster, Cotton Broker.	Improvements in propelling navigable vessels.
24	3rd Jan., 1859.	Jozé Luis, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, London, in the county of Middlesex, Patent Agent.	New economical candles.
26	„	Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France.	Certain improvements in steam generators.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
27	3rd Jan., 1859.	Charles Bell Blyth, of Dundee, Mill Manager.	Improvements in machinery for preparing and treating jute, hemp, flax, and other fibrous materials.
28	„	Edmund Balchin, of Myton Gate, Hull, in the county of York, Gun Maker.	An improved construction of projectile, applicable to the whale fishery.
29	„	William Renton, of Leeds, in the county of York, Cloth Dresser, Thomas Renton, of Leeds aforesaid, Millwright, and William Binns, of Leeds aforesaid, Cloth Finisher.	Improvements in raising the nap or pile of textile fabrics.
30	„	Jacob Furnival, of Leamington, in the county of Warwick, Thomas Furnival, of Cobridge, John Derbyshire, of Longton, and Francis Joseph Emery, of Burslem, all in the county of Stafford.	Improvements in apparatus for supporting articles of china and earthenware in kilns and ovens.
33	4th Jan., 1859.	John Barnett Joyce, of Bradford, in the county of York. Machine and Tool Maker.	Improvements in means, machinery, or apparatus applicable to wool combing.
34	„	William Hood, of 68, Upper Thames Street, in the city of London, Iron Merchant.	Improvements in racks and water cisterns for stables.
35	„	Alfred Bedborough, of the town and county of the town of Southampton, Architect and Surveyor.	An improved chimney cowl and ventilator.
36	„	Charles De Forest, of Leicester Square, in the county of Middlesex, Gentleman.	An improvement in the manufacture of springs for carriages and other uses.
38	5th Jan., 1859.	William Draper, of 2, Gordon Terrace, Holland Road, Brixton, in the county of Surrey, Artist.	Improvements in machinery for printing on paper and other fabrics.
40	„	Robert Rumney, of Manchester, in the county of Lancaster, Manufacturing Chemist, and William Stevenson Macdonald, of the same place, Mechanic.	Improvements in printing and dyeing woven fabrics and yarns or threads.
47	6th Jan., 1859.	William Renton, of Leeds, in the county of York, Cloth Dresser, Thomas Renton, of Leeds aforesaid, Millwright, and William Binns, of Leeds aforesaid, Cloth Finisher.	Improvements in finishing woollen and other fabrics.
48	„	John Aspinall, of Great Tower Street, in the city of London, Civil Engineer.	Improvements in machines for the manufacture of bolts, rivets, and spikes.
51	7th Jan., 1859.	William Spence, of 50, Chancery Lane, in the county of Middlesex, Patent Agent.	Improvements in the mode of taking photographic pictures on wood.
53	„	Edwin Heywood, of Halifax, in the county of York.	Improvements in weaving.
54	„	Jean Joseph Florance, of Paris, France, Merchant.	Improvements in reels or spooling wheels.
55	„	George Kennedy Geyelin, Civil Engineer, of London.	Regulating gas burners, which he calls "The universal gas burners' regulator."
59	„	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in machinery for winding, twisting, and doubling fibrous materials.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
60	8th Jan., 1859.	Henry Harden, of Dundalk, in the county of Louth, Ireland, Locomotive Superintendent to the "Dublin and Belfast Junction Railway Company."	Improvements in fire-bars for steam-boiler and other furnaces.
68	„	Edward Cobbold, of Hendon, in the county of Middlesex, Gentleman.	Improvements in instruments for writing and marking, and for the preparations of certain substances for conversion into instruments for writing and marking, and for the application to useful purposes of certain products arising from preparation aforesaid.
70	„	William Edward Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in steam engines and steam generators.
72	10th Jan., 1859	Robert Dawson Clegg, of Manchester, in the county of Lancaster.	Improvements in signalling apparatus.
75	„	Ferdinand Leihr, of Hoboken, in the state of New Jersey, United States of America.	Improvements in machinery for manufacturing metallic ribs for umbrellas, parasols, and other articles.
77	„	John White, of Finchley, in the county of Middlesex, Surgeon.	Improvements in cleansing or purifying air and in increasing or reducing the temperature thereof, and in the application of air so treated to sanitary and other uses.
78	„	Thomas Harris Toms, of Staining Lane, in the city of London.	The employment of certain materials for the production of raised ornamental figures or devices upon textile fabrics.
79	11th Jan., 1859	Eugenio Agneni, of 29, Devonshire Street, Queen Square, Bloomsbury, in the county of Middlesex, an Historical Painter, native of Rome.	Increasing particularly the effect of decorative pictures, landscapes, drawings, and prints, through looking-glasses.
82	„	Benjamin Robbin, of Yarmouth, Nova Scotia, Master Mariner.	Improvements in the machinery for working pumps.
83	„	William Tillie, of the city of Londonderry, in the county of Londonderry, Ireland, Shirt Manufacturer.	An improvement in the manufacture of shirts and shirt fronts.
86	„	Robert Hawthorn, and William Hawthorn, both of the town and county of Newcastle-upon-Tyne, Engineers.	Improvements in apparatus for promoting combustion and preventing smoke in coal-burning locomotives and other steam-boiler furnaces.
87	„	Charles William Siemens, of John Street, Adelphi, in the county of Middlesex.	Improvements in supports for electric telegraphic line wires, and in tools or apparatus to be used in the construction of such supports, part of which improvements are applicable to the joining of pipes and other articles.
91	12th Jan., 1859	William Bray and William Thomas George Bray, both of Folkestone, in the county of Kent, Engineers.	Improvements in locomotive and traction engines.
92	„	William Oliver, of Shadwell, in the county of Middlesex.	Improvements in boats and in the mode of propelling them.
93	„	John Thomson, of Dundee, in the county of Forfar, Manufacturer.	Improvements in the manufacture of rugs.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
94	12th Jan., 1859.	Joseph Hands, of Elgin Crescent, Notting Hill, in the county of Middlesex, Surgeon.	Improvements in preserving or preparing skins intended to be converted into leather or otherwise manufactured.
97	,,	Thomas Elwell, of Paris, in the empire of France, Engineer.	Improvements in governors for steam-engines and other motive-power engines.
100	,,	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	A new or improved metallic alloy.
101	,,	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	An improvement or improvements in the manufacture of cast steel.
104	13th Jan., 1859.	Charles Neale May, of Devizes, in the county of Wiltshire, Engineer.	An improved heat indicator.
105	,,	Richard Ashton Lightoller, of Chorley, in the county of Lancaster, Cotton Spinner.	Certain improvements in machinery or apparatus for spinning cotton or other fibrous materials.
106	,,	William Bennetts, of Tuckingmill, in the county of Cornwall, Workman.	Improvements in mechanism used for preventing accidents when raising or lowering skips, baskets, or apparatus, particularly applicable to mines.
112	,,	Daniel Lancaster Banks, of Kennington, in the county of Surrey, Engineer.	A method of constructing a travelling suspension rail or road-way, applicable among other uses as a bridge and lifting agent.
115	,,	John Grist, of Beazley Crescent, Old Ford, in the county of Middlesex, Engineer.	Improvements in machinery for cutting and shaping staves and heads for casks, and for the manufacture of casks.
117	,,	William Wilson, of Newcastle-on-Tyne, Hat Manufacturer.	Improvements in machinery for felting bodies of hats and bonnets.
118	,,	Thomas Herbert, of the firm of Thomas Herbert and Company, of Nottingham, and Edward Whitaker, also of Nottingham.	Improvements in the manufacture of warp lace.
120	,,	Joseph Barrans, of 2, Caledonian Terrace, Queen's Road, Peckham, in the county of Surrey.	Improvements in traction and portable steam-engines.
122	14th Jan., 1859.	Samuel Holt, of the city of Manchester, in the county of Lancaster, Silk Manufacturer.	A new and improved manufacture of woven silk fabrics.
125	,,	William Davis, of 2, Ann Street, Globe Fields, Mile End, in the county of Middlesex.	Improvements in sluice valves.
127	,,	Robert Romaine, of Chapel Street, Bedford Row, in the county of Middlesex, Gentleman.	An improved arrangement of portable railway.
128	15th Jan., 1859.	Joseph Eccles, of Blackburn, in the county of Lancaster, Cotton Manufacturer.	Improvements in the manufacture of articles from clay earths for building purpose s as substitutes for such articles as are usually formed of stone and other materials.
131	,,	Daniel Lancaster Banks, of 3, Kennington Row, Kennington Park, in the county of Surrey, Engineer.	Improvements in the method of constructing a travelling suspension rail or roadway to be used for the cultivation of land.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
134	15th Jan., 1859.	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	An improvement or improvements in the manufacture of cast steel.
142	17th Jan., 1859.	Edward Brooks, of 43, Edward Street, Dorset Square, in the county of Middlesex, Locksmith.	Improvements in locks.
144	„	George Collier and John Collier, both of Halifax, in the county of York.	Improvements in means or apparatus for washing and drying wool and other fibres, part of which improvements is also applicable for other purposes where steam, hot water, or other fluids are required to be conveyed under pressure through moveable connections.
145	„	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	Improvements in the manufacture of cast steel.
148	18th Jan., 1859.	John Foster, of Lancaster, in the county of Lancaster, Corn Merchant.	Certain improvements in machinery or apparatus called "spinning frames" and "roving frames" employed for spinning and roving flax, tow, hemp, jute, and other fibrous substances.
149	„	George Hamilton, of Liverpool, in the county of Lancaster, Professor of Chemistry, Queen's College, Liverpool aforesaid.	Improvements in treating rosin and resinous substances to obtain products therefrom, and in treating the products obtained from rosin and resinous substances.
150	„	Henry Gallon, Joseph Henry Bean, and Samuel Lumb, of Leeds, Machine Makers.	Improvements in machinery for slotting, morticing, tenoning, and cutting wood, iron, and other substances.
151	„	Charles Dickson Archibald, of Rusland Hall, in the county palatine of Lancaster, England, Esquire, at present being in the city of New York, United States of America.	Generating force.
152	„	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E. C., Patent Agent.	An improved silk thread, and a new fabric made entirely or partially from the same.
154	„	John Fawcett, of Kingston-upon-Hull, in the county of same town, Merchant.	An improved preparation of food for cattle and horses.
159	19th Jan., 1859.	William Augustus Frederick Powell, of Bristol, in the county of Somersetshire, Potter.	Improvements in stopping or closing jars and bottles.
161	„	Thomas Clarke, of Litchurch Lane, near Derby, in the county of Derby, and of Staveley, in the county of Derby, Moulder.	Improvements in the manufacture of core barrels for pipes, or columns used either for railway piles or columns, or for water pipes or sewerage pipes.
162	„	Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, W.C.	Improvements in machinery or apparatus for measuring and sorting silk and other textile materials.
164	„	Ebenezer Stevens, of 5, Patriot Row, Cambridge Road, in the county of Middlesex.	An improved cooking utensil.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
167	19th Jan., 1859.	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Certain improvements in the manufacture or production of lasts, boot trees, and clogs, and in the machinery and apparatus employed in the production of such articles
168	,,	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in apparatus for making cigarettes.
171	20th Jan., 1859.	Harvey Hilliard and Thomas Chapman, Cutlery Manufacturers, and Patentees of the "Furbator," of Glasgow, in the county of Lanark, North Britain.	Improvements in table knives, and in table knife sharpeners.
172	,,	Abraham Lindo, of Batignolles, in the French empire, Chemist.	Improvements in manufacturing soap.
175	,,	Thomas Greenwood and John Batley, of Leeds, in the county of York, Machine Makers.	An improvement in the process of gassing textile fabrics.
176	,,	Samuel Phillips, of Moseley, in the county of Worcester, Gentleman.	Improvements in sliding sashes, shutters, or doors.
177	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improved apparatus for measuring water and other liquids.
178	,,	Thomas Greenwood, John Batley, and Jacob Dockray, of Leeds, in the county of York, Machinists.	Improved machinery for converting hemp and flax fibres into yarn, twine, ropes, and cordage.
179	,,	Joseph Bent, of Newhall Street, Birmingham, in the county of Warwick, Military Ornament Manufacturer.	Certain improvements in clasps or fastenings applicable for belts, garters, and other purposes.
181	,,	Josiah Latimir Clark, of Haverstock Hill, and John Muirhead, of Gloucester Road, Regent's Park, both in the county of Middlesex.	Improvements in electric telegraphs, and in the apparatus used in working the same.
182	,,	Henry Sagar, of Broughton, near the city of Manchester, in the county of Lancaster, Bleacher and Dyer, and Alexander Schultz, of Paris, in the kingdom of France, and of the city of Manchester aforesaid, Chemist.	Improvements in producing pink shades on cotton fabrics or yarns.
183	21st Jan., 1859.	Thomas Richardson, of 20, New Bridge Street, Newcastle-on-Tyne.	Improvements in the manufacture of manure.
185	,,	Louis Le Prince, of No. 261, Regent Street, in the county of Middlesex, Bootmaker.	The improvement of ladies' boots and shoes, called "The Caméleon boot and the Caméleon shoe."
189	,,	Richard Howell, of Smethwick, in the county of Stafford, Gas Fitter, and Richard James Willder, of Birmingham, in the county of Warwick, Hatter.	An improvement or improvements in taps or stopcocks.
194	,,	James Hill Hume, of Broughty Ferry, in the county of Forfar, North Britain, Baker.	Improvements in warming apparatus for the feet.
197	,,	James Newman, of Birmingham, in the county of Warwick, Manufacturer.	Improvements in the manufacture of chains.
202	22nd Jan., 1859.	Benjamin Templar, of the city and county of Bristol, Dyer.	Improvements in umbrellas and parasols.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
203	22nd Jan., 1859.	Edward Dorsett, of 76, Old Broad Street, in the city of London, Tar Distiller, and John Bennington Blythe, of Minerva Place, New Cross, in the county of Kent, Merchant.	Improvements in the distillation of oil from coal tar, and in apparatus for preserving timber therewith.
205	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improved machinery for cutting files.
208	,,	Richard Barter, of St. Ann's Hill, Blarney, in the county of Cork, Doctor of Medicine.	Improvements in heating and ventilating buildings, and in apparatus connected therewith.
209	24th Jan., 1859.	William Collett Homersham, of Adelphi Terrace, Strand, in the county of Middlesex, Civil Engineer.	Improvements in floating "gridirons" or stages for repairing ships or other vessels.
210	,,	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	Improvements in the manufacture of cast steel and iron.
211	,,	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	An improvement in the manufacture of cast steel.
212	,,	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in pumps.
213	,,	Joseph Laubereau, of Paris, in the empire of France, Civil Engineer.	Improvements in air engines.
214	,,	John Smith and William Henry Smith, of 8, Upper Fountain Place, City Road, in the county of Middlesex, Manufacturers.	Certain improvements in manufacturing paper and in producing watermarks, patterns, figures, letters, and devices thereon, and in the construction of the mechanism employed therein.
215	,,	John Savory, of 143, New Bond Street, Chemist and Druggist, and William Robert Barker, of the same place, Chemist.	Improvements in bottles for medicines and poisons.
217	,,	Arthur Warner, of 31, Threadneedle Street, in the city of London, and William Tooth, of Sumner Street, Southwark, in the county of Surrey.	Improvements in the manufacture of iron and gases for such and other uses.
218	,,	John Guy Proger, of 13, Trinity Street, Cardiff, and David Davies, of Stuart Street, Bute Docks, Cardiff, in the county of Glamorgan.	Improvements in lanterns used on board ship to signal to the steersman.
221	,,	William Tasker the younger, of the firm of William Tasker and Sons, of Waterloo Iron Works, near Andover, in the county of Hants, Engineer.	Improvements in ploughs.
223	25th Jan., 1859.	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in machinery or apparatus for cutting and shaping wood.
230	,,	Henry Brecknell, of the city of Bristol, Brassfounder, and John Dyer, of the same place, Gentleman.	Improvements in cocks and valves.
234	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	An improvement in life-preserving vests.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
235	26th Jan., 1859.	William Richmond Alexander, of Glasgow, in the county of Lanark, North Britain, Merchant.	Improvements in furnaces and apparatus for the manufacture of sugar and for the consumption or prevention of smoke.
237	„	Obed Hussey, of Baltimore, United States of America.	Improvements in the construction of ships' blocks.
240	„	Frederick Carl Christian Paulsen and Albin Alsing, both of Emmett Street, Limehouse, in the county of Middlesex.	Improvements in preparing beverages usually called "Punch."
245	27th Jan., 1859.	Thomas Hartshorne, of West Bromwich, in the county of Stafford, Brass Founder.	An improved metal to be used for making journey brasses for mills, rollers, forges, and all kinds of shafts and machinery, and also for shipping and for bearings for shafts and journey brasses in general.
246	„	Elijah Dixon, of Preston, in the county of Lancaster, Mechanic, and Henry Whittaker, of the same place, Mechanic.	Improvements in apparatus used in weaving textile fabrics.
250	„	James Buckingham, of Walworth Common, in the county of Surrey, Civil Engineer, and George Salt, of Saltaire, near Bradford, in the county of York, Manufacturer.	Improvements in the construction and adaptation of drawing and other rollers employed in drawing and compressing fibres, which improved construction of rollers is also applicable in compressing fabrics.
251	„	Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, W.C.	Improvements in the manufacture of biscuits.
253	„	William Crowther, of Leeds, in the county of York, Manufacturing Chemist.	Improvements in the manufacture of prussiates of potash or soda, and in recovering a useful material therefrom.
255	28th Jan., 1859.	Ignazio Zacheroni (native of Italy), residing at Liverpool, in the county of Lancaster, Artist.	An improved mode or method of preventing the escape of smoke into the atmosphere, and in the construction of chimney "pots" or "tops" for curing smoky chimneys.
256	„	William Robertson, of the city of Manchester, in the county of Lancaster, Mechanician.	A new apparatus for propelling boats on canals, rivers, and lakes of moderate depth.
259	„	Frederic Prince, of 138, New Bond Street, in the county of Middlesex, Gunmaker.	A new breech-loading gun.
267	29th Jan., 1859.	Joseph Marino, of the city of Stockholm, in the kingdom of Sweden, Mechanician.	us clo An inodoro set or commode.
269	„	Henry Grissell, of Regent's Canal Iron Works, Eagle Wharf Road, in the county of Middlesex, Engineer.	Improvements in machinery for moving ships and vessels on slips or inclined ways.
270	„	Jean Justin, Albert De Bronac, and Augustin Joseph Martial Deherryron, Civil Engineers, of Paris, in the empire of France.	A new or improved process for treating metallic sulphurets, phosphurets, arseniurets, antimoniurets, and particularly sulphuretted ores of lead, antimony, copper, silver, zinc.
272	31st Jan., 1859.	Thomas Plunkett Smith, of Stanmore, in the county of Middlesex, Schoolmaster.	An apparatus for guiding or directing the pen or pencil in writing or drawing.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
274	31st Jan., 1859.	John Raywood, Engineer, of Wentworth, in the county of Yorkshire.	Certain improvements in the construction and method of working sewing-machines.
278	,,	John Peter Booth, of Cork, in the kingdom of Ireland, Feather Factor.	Improvements in ventilating ships.
281	1st Feb., 1859.	Laurent Rigolier, Engineer, residing at Lyon, Place Grolier, 5, Rhône, in the empire of France.	A new brake for railway carriages.
283	,,	Samuel Birchall Eveleigh, of Salford, in the county of Lancaster, Hat Manufacturer.	An improved form or construction of hats or covering for the head.
284	,,	Richard Needham, of Dukinfield, in the county of Chester, Engineer.	An improved water guage for steam-boilers.
289	,,	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Improvements in sewing machines.
290	,,	George Arthur Waller, of the city of Dublin, Brewer to Arthur Guiness, Son, and Co.	Improvements in the means of and apparatus for expressing liquid from semi-fluid substances and other substances containing liquid.
294	,,	Edward Hammond Bentall, of Heybridge, near Maldon, in the county of Essex, Ironfounder.	Improvements applicable to machinery for grinding or pulverizing various substances.
296	2nd Feb., 1859.	Edward Ellis Allen, of Brompton Row, in the county of Middlesex, Engineer.	Improvements in stereoscopic apparatuses.
297	,,	Edward Wilkins, of No. 7, Addington Place, Camberwell, in the county of Surrey, Gentleman.	Improvements in drain pipes and tiles for draining and liquid manuring land.
302	,,	John Buncher, of Birmingham, in the county of Warwick, Brass Founder.	Improvements in the manufacture of eyes or fastenings for stair rods.
303	,,	Isaac Clements, of Birmingham, in the county of Warwick, Warehouse Clerk.	A new or improved method of manufacturing curtain rings.
305	,,	George Leach, of Leeds, in the county of York, Yarn Spinner and Cloth Manufacturer.	Improvements in leashing yarn or thread in the hank, and in machinery for winding off the same.
307	3rd Feb., 1859.	Thomas Storer, of Birmingham, in the county of Warwick, Undertaker and Funeral Carriage Proprietor.	A new or improved funeral carriage.
310	,,	Henry Constantine Jennings, of 8, Great Tower Street, in the city of London, Practical Chemist.	Improvements in the manufacture of paper and artificial parchment, and of gelatine applicable to the sizing of the same and other purposes.
311	,,	John Petrie, junior, of Rochdale, in the county of Lancaster, Machinist, and Thomas Wrigley, of Heap Bridge, in the said county, Paper Manufacturer.	Improvements in machinery or apparatus for washing rags and other materials for the manufacture of paper.
314	4th Feb., 1859.	Mark Smith, of the firm of William Smith and Brothers, of the Sun Foundry, Heywood, in the county of Lancaster, Machine Makers.	Certain improvements in looms for weaving.
317	,,	Alexander Allan, of Perth, in the county of Perth, North Britain, Engineer.	Improvements in locomotive steam engines, in part applicable for retarding and stopping railway trains.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
320	4th Feb., 1859.	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Editor of the Mechanics' Magazine and Patent Agent.	An improvement in cooling worts and beer.
322	,,	George Henry Baylis, of 13, Vauxhall Walk, Lambeth, in the county of Surrey, and Francis Robinson, of 88, Salisbury Street, Lisson Grove, in the county of Middlesex.	An improved indicator for registering the withdrawal of liquids from vessels.
323	,,	Frederick Herbert Maberly, of Stowmarket, in the county of Suffolk, Master of Arts.	Improvements in obtaining spring power, and in its application to various purposes.
325	,,	Jacques Marie Edouard Masson, of Rue des Fossés, St. Thomas, Evreux, France, Gentleman.	Improvements in apparatus to facilitate working under water.
328	,,	John Honeyman, of Glasgow, in the county of Lanark, North Britain, Miller.	Improvements in the construction of ships, vessels, and boats, and in propellers for propelling the same.
330	,,	William Clark, of 53, Chancery Lane, in the county or Middlesex, Engineer and Patent Agent.	Improvements in the means or apparatus for preserving grain, flour, eggs, and other vegetable and animal substances.
332	5th Feb., 1859.	Nathanial Greenhalgh, of Bolton, in the county of Lancaster, Cotton Spinner, and William Shaw, of the same place, Cotton Spinner, and James Mallison, junior, of the same place, Yarn Agent,	Certain improvements in the treatment and preparation of yarns or threads previously to dyeing.
335	,,	Thomas Sykes, of Cleakheaton, in the county of York, Manfacturing Chemist, and Benjamin Clifford Sykes, of the same place, M.D.	Improvements in obtaining or separating oily, fatty, greasy, tarry, waxy, and resinous substances from oleaginous seeds, nuts, and fruits, wool, silk, hair, cotton, flax, line, hemp, furs, skins, leather, bones, fish, and other animal matters and refuse, woollen and cotton waste and refuse, also textile fabrics and refuse grease produced in various branches of industry, indigo, lac, lac dye, and other dyes.
336	,,	Thomas Russell Ayerst, of Newenden, in the county of Kent, Bookkeeper.	Improvements in breech-loading guns and other fire-arms.
338	7th Feb., 1859.	George Frederic Chantrell, of Liverpool, in the county of Lancaster, Furnace Engineer.	Improvements in the treatment of charcoal after its manufacture or revivification.
347	,,	John Wilson, of 55, John Street, Sunderland.	Improvements in ventilating mines, and in combining apparatus used for such purpose.
348	8th Feb., 1859.	Thomas Moss, of 69, Fleet Street, in the city of London, in the employment of Messrs. Perkins, Bacon, and Co.	Improvements in the manufacture of paper and printing ink suitable for bank notes, bills of exchange, and other documents requiring like security against being copied.
350	,,	James Hosking, Oil Merchant, of Walworth Common, in the county of Surrey.	Improvements in the manufacture of lamps.
352	,,	Doctor Ernst Bagnicki, of New York, of the county and state of New York, in the United States of America.	An improved syringing apparatus for curing leucorrhea and similar sexual diseases.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
355	8th Feb., 1859.	JOHN ASPINALL, of Great Tower Street, in the city of London, Civil Engineer.	An improvement in the refining of sugar.
359	,,	THOMAS STOKES CRESSEY, of High Street, Homerton, in the county of Middlesex.	Improvements in machinery used in the manufacture of casks.
361	9th Feb., 1859.	EDWARD WILKINS, of No. 7, Addington Place, Camberwell Road, in the county of Surrey, Gentleman.	Improvements in flower vases.
362	,,	JOHN STEPHEN JOSEPH, of Rhostyllan, near Wrexham, in the county of Denbigh, North Wales.	Improvements in coke ovens, and in cooling and extinguishing coke.
365	,,	JOSEPH CROSSLEY, of Halifax - -	Improvements in the means employed when steaming printed yarns.
367	,,	JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in firearms.
368	,,	GEORGE BOWER, of Saint Neot's, in the county of Huntingdon, Gas Engineer.	Improvements in apparatus for the manufacture of illuminating gas.
369	,,	JAMES EDWARD MCCONNELL, of Wolverton, in the county of Bucks, Civil Engineer.	Improvements in steam boilers, and in the generation and treatment of steam.
370	,,	WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	An improved mode of bleaching and purifying or refining sugar and vegetable juices or extracts.
371	,,	EDWARD HERRING, of the Heath, Weybridge, in the county of Surrey.	Improvements in the mashing and fermenting of grain for the production of alcohol.
373	10th Feb., 1859.	HENRY POTTER BURT, of Charlotte Row, Mansion House, in the city of London.	Improvements in railway carriages and waggons.
374	,,	JOHN YOUNG, of Wolverhampton, in the county of Stafford, Manufacturer.	An improvement or improvements in the construction of knobs and the roses used for connecting knobs with doors and with the cases of locks and latches and other like fastenings.
376	,,	WILLIAM ADOLPHE COVERT, of Long Island, New York, in the United States of America.	An improved self-acting railway switch.
377	,,	ROBERT JOSEPH ELLIS, of Liverpool, in the county of Lancaster, Merchant.	Improvements in the apparatus for lifting sunken vessels and other submerged bodies.
386	11th Feb., 1859.	HENRY BRUCE, of Kinleith Mill, Currie, in the county of Mid Lothian, North Britain, Paper Manufacturer.	Improvements in apparatus for the manufacture of paper.
388	,,	ROBERT COGAN, of Red Lion Square, in the county of Middlesex, Glass Dealer.	Improved instruments for crushing and mixing solid and liquid substances.
390	,,	CHARLES JACKSON, of Store Street, Bedford Square, in the county of Middlesex, Pianoforte Manufacturer.	Improvements in the action of pianofortes.
391	,,	JAMES GRIMES, of 6, Osborn Street, Whitechapel, Pewterer and Beer Engine Manufacturer.	Improvements in beer engines.

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393	12th Feb., 1859.	Gaylard Hadwen, of Audenshaw, in the county of Lancaster, and John Wadsworth, of Droylsden, in the said county.	Improvements in jacquard apparatus applicable to power looms.
395	,,	Thomas Willis and George Chell, both of Longsight, near the city of Manchester, Machine Makers.	Improvements in machinery for spinning, twisting, doubling, and winding yarns and threads.
399	,,	Thomas White, of Portsmouth, in the county of Southampton, Ship Builder, and George Jenkins, of the same place, Engineers.	Improvements in apparatus for raising and lowering ships along inclined slips.
400	,,	James Bennett and John Bennett, of the firm of Bennett and Sons, of Kingsland Road, in the county of Middlesex, Engineers.	An improvement in refrigerators for cooling beer and worts.
405	,,	Robert Bell, of Paris, in the empire of France, and of the Office for Patents, No. 4, Trafalgar Square, Charing Cross, in the county of Middlesex.	Improvements in separating and recovering wool from fabrics composed of wool or wool in connection with cotton and other vegetable substances.
409	14th Feb.,	Thomas Hunt, of Crewe, in the county of Chester, Engineer.	Improvements in steam boilers or generators, and in the prevention or combustion of smoke.
410	,,	Charles Sanders, Photographic Mat Manufacturer, of Harford Street, Birmingham, in the county of Warwick.	Certain improvements in ornamenting English passe-partouts for photographic pictures, also the glasses used with the same, and which said modes of ornamenting are also applicable to ornamenting photographic frames generally.
411	,,	John Wright, of New George Street, Sheffield, in the county of York, Spring Manufacturer.	Improvements in reducing and rolling steel and iron wire and other forms of those metals in long lengths.
413	,,	James Copcutt, of 26, Kirby Street, Hatton Garden, in the county of Middlesex.	Improvements in obtaining light from gases.
414	,,	Robert Clegg, of Islington, in the county of Middlesex. Frederick Angerstein, of Kennington, in the county of Surrey, and John William Page, of Walworth Road, in the county of Surrey.	Improvements in making soap.
418	15th Feb., 1859.	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	Improvements in the manufacture of steel, iron, and cast steel.
420	,,	Walter Raymond, of No. 4, Albion Square, Dalston, in the county of Middlesex, Master Mariner.	An improved life-raft.
421	,,	John Paterson, of Wood Street, in the city of London, Manufacturer.	Improvements in brace buckles and loops and in braces.
423	,,	George Bedson, of Manchester, in the county of Lancaster, Manager for Messrs. Richard Johnson and Brother Wire, Manufacturers.	Improvements in joining wire for telegraphic and other purposes.
426	16th Feb., 1859.	Samuel Bailey, Mining Engineer, of Wednesbury, in the county of Stafford.	Certain apparatus for preventing the skip in mine operations being pulled over the pulley on which the rope or chain works to which such skip or cage may be attached as well as preventing the skip or cage redescending until put in motion for that purpose.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
428	16th Feb., 1859.	Charles Edward Wright, of Nottingham, Commercial Traveller.	Improvements in means or apparatus employed in the nursing or treatment of infants.
429	,,	Richard Jennings Stevenson Pearce, of Fleet Street, in the city of London, Machinist.	Improvements in weighing and dynamic machines.
431	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	An improved mowing machine or grass harvester.
432	,,	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	An improvement in the construction of brushes.
434	,,	William H. Horstmann, of the city of New York, in the county of New York, and the state of New York, U.S.A.	Telegraphic cables and the mode of constructing the same and laying them down.
437	,,	Jules Seguin, Doctor of Medicine, of 4, Grand Rue de Gravelle à St. Maurice (Seine), France.	Improvements relating to the employment of moving power arising from the tides and its application to manufacturing, agricultural, and other purposes.
441	17th Feb., 1859.	Samuel Thomas Cooper, of Upper Clapton, Gentleman.	Improvements in the use and application of artificial light.
447	,,	Frederick William Emerson, of New Charlton, in the county of Kent, Mining Engineer and Metallurgical Chemist.	Improvements in the treatment of certain ores of lead and obtaining from them valuable primary and secondary products.
448	,,	Charles Fay, of Manchester, in the county of Lancaster, Railway Carriage Builder.	Improvements in apparatus for working railway breaks.
449	,,	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in apparatus for propelling and steering vessels, and other floating craft.
456	18th Feb., 1859.	William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	Improvements in pressure guages.
458	19th Feb., 1859.	Pierre Antoine Joseph Dujardin, of the town of Lille, France, Physician.	Improvements in the printing apparatus of railway telegraphs.
459	,,	Alphonse René Le Mire de Normandy, of 67, Judd Street, Brunswick Square, in the county of Middlesex, Analytical Chemist.	Improvements in an apparatus for obtaining fresh water from salt water.
461	,,	William Clay, of Liverpool, in the county of Lancaster, Iron and Steel Manufacturer.	Improvements in the manufacture of deck and other beams, and of angular and other bars of various forms.
462	,,	William Basford, of Burslem, in the county of Stafford, Brick and Tile Manufacturer.	Improvements in the method of and means for drying bricks and tiles preparatory to their being burnt, and also in the construction of kilns or ovens for burning such bricks, tiles, pipes, pottery, or earthenware, and in the mode of charging or placing these said articles therein to be burnt or fired, and also in certain appliances for regulating the heat therein.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
463	19th Feb., 1859.	Samuel Wheatcroft, of Brudenell Place, New North Road, county of Middlesex, Engineer.	Improvements in the method of and the means for uniting lace to blond and other fabrics, and also in the apparatus used for manufacturing or converting the same into bonnet and cap fronts, rouches, and such like similar articles of millinery.
464	,,	Charles Fréderic Vasserot, of 45, Essex Street, Strand, London, Patent Agent.	An improved apparatus for manufacturing the strands of wire ropes.
467	,,	Ferdinand Pierre Jean Van den Ouwelant, of Paris, France, Gentleman.	Improvements in apparatuses to be applied to fire-places for obtaining a more complete combustion of the fuel employed therein.
469	21st Feb., 1859.	Obed Blake, of Blackwall, in the county of Middlesex.	Improved machinery or apparatus used in the manufacture of glass.
471	,,	Thomas Wilson, of Birmingham, in the county of Warwick, Engineer.	Improvements in the manufacture and construction of ordnance.
474	,,	Peter Spence, of Pendleton, in the county of Lancaster, Manufacturing Chemist.	Improvements in the manufacture of alum, and in the mode of and apparatus for condensing or destroying gases arising therefrom.
475	,,	Robert Jobson, of Wordsley, in the county of Stafford, Iron Founder.	Improvements in supplying water or other fluid to axletree boxes and other journal bearings to lubricate the same.
477	,,	Richard William Johnson, of Oldbury, in the county of Worcester, Railway Carriage Builder, and William Stableford, of the same place, Manager.	Improvements in axle boxes.
478	,,	Joseph Schloss, of Cannon Street, in the city of London, Manufacturer.	An improvement in locks or clasps for portemonnaies, pocket books, bags, and other like purposes.
481	22nd Feb., 1859.	Joseph Grimond, of the city of Manchester, in the county of Lancaster, Manufacturer.	Improvements in the treatment and preparation of jute and other fibrous materials, and in machinery or apparatus employed therein.
486	,,	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	A method of fixing tannin upon textile fibres, and the employment thereof in dyeing black and dark colors.
488	,,	William Gossage, of Widnes, in the county of Lancaster.	Improvements in the utilization of alkali waste.
489	23rd Feb., 1859.	Augustus William Smethurst, of Chorley, in the county of Lancaster, Cotton Spinner and Manufacturer.	Improvements in machinery for driving looms for weaving.
493	,,	Uriah Scott, of Camden Town, in the of Middlesex, Civil Engineer.	Improvements in carriages and various parts of the same, which parts may be applied to vehicles of any description.
495	,,	Samuel Rodgers Samuels, of Nottingham.	Improvements in twist lace machines.
496	,,	Samuel Russell, of No. 12, Sheaf Gardens, Sheffield, in the county of York, Britannia Metal Manufacturer.	An improvement in the manufacture of handles for tea and coffee pots, jugs, kettles, knives, daggers, and forks, or any other description of article to which handles are applied.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
500	24th Feb., 1859.	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	A new metallic compound or alloy.
501	„	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	An improvement in the manufacture of east steel.
504	„	Adolphe Lançon, jun., Watch Manufacturer, at Besançon, department du Doubs, empire of France.	A new system of watches.
507	„	Enock Price, of Doncaster, in the county of York, Railway Contractor, and Edmund Hawkins, of the same place, Builder and Contractor.	Improvements in the mode of forming fish plates, and in the method of fixing or attaching them to the joints of rails on railways.
509	25th Feb., 1859.	Alexander Reid, of the city of Manchester, Merchant, and Richard Tonge, of the same place, Manufacturer.	Certain improvements in weaving, and in the machinery employed therein.
511	„	Thomas Callender Hinde, of Dudley, in the county of Worcester, Iron Merchant, and George James Hinde, of Wolverhampton, in the county of Stafford, Merchant.	Improvements in coating iron with copper or alloys of copper.
518	26th Feb., 1859.	Frederick Weekes, of Bolney, in the county of Sussex.	The treatment of certain alcoholic products.
520	„	James Lee, of Saint Helen's, in the county of Lancaster, Grocer.	Certain improvements in ploughs.
521	„	Joseph Hine, of Clerkenwell, in the county of Middlesex, Fancy Cabinet Manufacturer.	An improved joint for cabinet making, carpentry, and other constructive purposes.
522	„	William Burgess, of the firm of Burgess and Key, of Newgate Street, in the city of London, Agricultural Implement Makers.	An improvement in reaping and mowing machines.
523	28th Feb., 1859.	Edward Gatwood, of Great George Street, Westminster, in the county of Middlesex, Carriage Builder.	Improvements in buffing, traction, and bearing springs, applicable to railway carriages and locomotive engines.
524	„	François Brignoles, residing at No. 3, Duke Street, Adelphi, London, county of Middlesex.	The disinfection and rectification of alcohols by the separation of the essential and other oils from the alcohol.
525	„	Alexander Martin, Merchant, and Alexander Crichton, Mechanic, both residing in Pollockshaws, in the county of Renfrew.	Improvements in weaving and woven goods.
527	„	John Leigh, of the city of Manchester, in the county of Lancaster, Surgeon.	Improvements in the purification of coal gas.
529	„	John Henry Johnson, of 47, Lincoln's Inn Field's, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in apparatus for stopping horses.
530	„	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in apparatus for taking soundings, applicable also to the throwing of life lines.
536	1st March, 1859.	Edward Joseph Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London.	Improvements in preserving animal food, poultry, game, fish, fruit and other similar substances.
537	„	Thomas Cloake, of No. 6, Saville Row, Walworth, in the county of Surrey, Watch Maker.	Stopping of the bodies and wheels of railway and other carriages.

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541	1st March, 1859.	JOHN EDWARDS, of Fenton, in the county of Stafford, Manufacturer.	Improvements in stacking or holding biscuit, earthen, china, and glossed ware for firing.
546	2nd March, 1859.	JOHN THOMSON CARTER, of Belfast, in the county of Antrim, Flax Spinner.	Improvements in machinery for crushing, bruising, and preparing flax, hemp, and other fibrous materials requiring such treatment.
547	,,	PETER CURRIE, General Brass Founder, of Birmingham, in the county of Warwick.	Certain improvements in spindles for locks, latches and other door fastenings.
550	,,	ROBERT HANHAM COLLYER, of Alpha Road, in the county of Middlesex, Doctor of Medicine and Civil Engineer.	A process of preparing materials for the manufacture of paper, and a machine employed therein, which machine is applicable for crushing, grinding, bruising, and reducing various substances.
553	,,	JOHN WILLIAM HARKER, of No. 24, Upper Barnsbury Street, Islington, and JOHN KINGSFORD FIELD, of Upper Marsh, Lambeth.	Improvements in coating the bottoms of iron and other ships and vessels.
554	,,	ETIENNE ROCHE, of Marseille town, in the French empire, Manufacturer.	Improvements in the manufacture of paper suitable for forming cigarettes and for other purposes, and also improvements in the manufacture of cigars.
556	,,	WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in the construction of barometers or instruments to indicate pressure.
557	,,	JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in the construction of grease boxes and bearings generally.
558	,,	JOSEPH KERSHAW, of Allerton, near Bradford, in the county of York, Overlooker.	Improvements in means or apparatus employed in weaving.
559	,,	JAMES NEWCOMB, of the city of Bristol, Engineer, and JOSEPH GWYRE LOVELL, of the city of Bristol, Merchant.	Improvements in obtaining and applying motive-power especially adapted amongst other purposes to the propelling of ships and vessels.
560	,,	HENRY BROWN, of the firm of Henry Brown and Company, Wollen Manufacturers, of Galashiels, in the county of Selkirk, Scotland.	Improvements in machinery for cutting and finishing the surfaces of woollen and other fabrics.
566	3rd March, 1859.	JAMES DALZIEL DOUGALL, of Glasgow, in the county of Lanark, North Britain, Gun Maker.	Improvements in fire-arms.
568	,,	WILLIAM SCORE, of 9, Osborne Terrace, Clapham Road, in the county of Surrey, Chemist.	Improvements in the manufacture of soap.
569	,,	HORATIO LEONARD, of the state of Massachusetts, of the United States of America.	An improvement in the manufacture of paraffine candles.
570	,,	WILLIAM TUCKER, of the state of Massachusetts, of the United States of America.	An improvement in bit stocks or auger handles.
573	4th March, 1859.	CHARLES FREDERICK DENNET, of Pall Mall, Gentleman.	Improvements in bayonets.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
575	4th March, 1859.	James Cowban and Elias Andrews, of Burnley, in the county of Lancaster.	Improvements in machinery or apparatus for spinning fibrous materials.
577	,,	Charles Roper Mead, of 176, Great Dover Street, in the borough of Southwark, Gas Engineer.	Improvements in water gas meters.
581	5th March, 1859.	John Fraser, of the town and county of Banff, North Britain, Manager of the Banff Iron Foundry.	Improvements in ploughs.
582	,,	Frederick William Parker, of Sheffield, in the county of York, Saw Maker.	Improvements in sewing machines.
585	,,	François Verdeil, Medical Doctor, of No. 30, Rue St. Sulpice, in the city of Paris, and Edmond Michel, Chemist, of No. 4, Quai Impérial, Puteaux Seine.	Improvements in treating madder.
586	,,	George Leach, of Leeds, in the county of York, Yarn Spinner and Cloth Manufacturer.	Improved machinery for reeling and leashing yarn or thread.
588	,,	Richard Leake and Matthew Sykes, both of Barnsley, in the county of York.	Improvements in furnaces for consuming smoke and generating heat, parts of which improvements are applicable to furnaces generally.
592	7th March, 1859.	William Palmer, of Long Eaton, in the county of Derby, Station Master.	An improved railway carriage break, and coupling apparatus connected therewith.
594	,,	William Gossage, of Widnes, in the county of Lancaster, Chemist.	Improvements in the treatment of certain ores of copper for the extraction of metals therefrom.
595	,,	John Aspinall, of Great Tower Street, in the city of London, Civil Engineer.	Improvements in evaporating in vacuo.
596	,,	Pierre Ernest Aimont, of Paris, in the French empire, Civil Engineer.	Improvements in the construction of waggons and other carriages for railways and ordinary roads, and of apparatuses connected therewith.
599	,,	John Louis Jullion and Gordon Pirie, both of Stoneywood Works, Aberdeen, North Britain, Paper Makers.	The manufacture of gelatine.
603	8th March, 1859.	George Twigg, of Birmingham, in the county of Warwick, Manufacturer.	An improved fusee igniter for the use of smokers.
604	,,	Charles Mills, of High Street, Camden Town.	Improvements in the action of pianofortes.
612	9th March, 1859.	John Robinson Nicholson, of Redditch, in the county of Worcester, Doctor of Medicine.	New or improved machinery to be used in the manufacture of needles, a part or parts of which said machinery may also be used for pointing pins and other like articles.
613	,,	John Erwood, of 132, Goswell Street, Clerkenwell, in the county of Middlesex, Paper Stainer, and Joseph Skertchly, of Ashby-de-la-Zouch, in the county of Leicester, Engineer.	Improvements in the manufacture of glass, sand, and emery papers, and cloths, and other similar articles used for like purposes.
615	,,	John Scott Russell, of Great George Street, Westminster.	Improvements in building ships and other vessels.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
617	9th March, 1859.	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved machinery for rolling horse-shoe iron.
618	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in billiard tables.
621	10th March, 1859.	James Yuill, of Glasgow, in the county of Lanark, North Britain, Saddlers' Ironmonger.	Improvements in saddle-trees.
623	,,	Henry Lodge, of Liverpool, in the county of Lancaster, Merchant.	Improved means of protecting ships, batteries, and other constructions or buildings from the effects of projectiles of various kinds.
626	11th March, 1859.	Robert Hellard, Ironmonger, Taunton, Somerset.	Improvements in reaping and mowing machines.
627	,,	Samuel Wheatcroft, of Brudenell Place, New North Road, county of Middlesex, Engineer.	Improvements in the construction of goffering and rouching machines, in order to render them self-registering and self-indicating.
628	11th March, 1859.	Nathan Washburn, of the state of Massachusetts, of the United States of America.	A new and useful or improved machine for rolling tires for wheels.
629	,,	Frederick Clarke, of Norland Square, in the county of Middlesex, Gentleman.	An improved mode of and apparatus for cutting, drying, and preparing peat to be used as fuel, or for other purposes for which it may be usefully employed.
630	,,	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	An improved construction of steam-engine applicable also to the raising of water.
635	12th March, 1859.	John Thomas Calow, of Staveley, in the county of Derby, Joiner, Cabinet Maker, and Carriage Builder.	A compound action in cage machinery with the apparatus connected therewith, having a perforated shield for saving life and property in the event of a rope, band, or chain breaking, or the engine man drawing the cage too high, at coal or other shafts where slides are applicable, which said invention is also applicable to hoisting or other lifting machines.
636	,,	James Thornton, of Liverpool, in the county of Lancaster.	Improvements in machinery for the manufacture of bricks, tiles, and other similar articles.
637	,,	John Court, of Brompton Row, in the county of Middlesex, Gas Fitter.	An improvement in nibs for gas burners.
638	,,	Richard Allison, of Birmingham, in the county of Warwick, Engineer.	Improvements in apparatuses for boring and sinking.
639	,,	James Macnab, of the town and county of Linlithgow, North Britain, Designer.	Improvements in telegraphing or signalling apparatus.
644	14th March, 1859.	David Joy, of Leeds, in the county of York, Engineer.	Improvements in hydraulic engines and meters.
645	,,	Charles Henry Hurst, of Victoria Terrace, Royal Road, Kennington Park, in the county of Surrey.	An improved wrench or spanner.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
648	14th March, 1859.	JOHN SAMUEL DAWES, of Smethwick House, near Birmingham, Gentleman.	A new or improved method or combination of arrangements for the better securing and collecting of night soil or town manure, and rendering it more valuable for agricultural purposes.
650	15th March, 1859.	CHARLES DESURMONT, of Seclin, France, Gentleman, and CHARLES GOUDEAU, of Alost, Belgium, Mechanical Engineer.	Certain improvements in looms for weaving.
651	,,	GEORGE BELL GALLOWAY, of Newcastle-on-Tyne, in the county of Northumberland.	Improvements upon and in connection with his former patents, and in the manufacture of fuel, and working steam engines more economically.
654	,,	BENJAMIN RIDER, of 61, Red Cross Street, Boro', in the county of Surrey, Leather Dresser and Hat Leather Manufacturer.	Improvements in hats, caps, and other coverings for the head, and in apparatus used in the manufacture of such articles.
657	16th March, 1859.	WILLIAM ROBERTSON, of Dundee, in the county of Forfar, North Britain, Engineer, and JAMES GUTHRIE ORCHAR, of same place, Engineer.	Improvements in weaving.
660	,,	ISAIAH ASH, of No. 17, Great Bridport Street, Blandford Square, in the county of Middlesex, Locksmith.	Improvements in the construction of locks and latches.
662	,,	HENRY AMBLER, of Halifax, in the county of York.	Improvements in breech loading ordnance, and in the means of producing part or parts thereof, which improvements are also applicable to what are called small arms.
665	,,	JOSEPH MICHEL DENYS, of Charleroi, in the kingdom of Belgium, Gentleman, and 4, South St., Finsbury, London.	Certain improvements in the construc- of railway crossings.
668	,,	JAMES CLARK, of Newton Heath, near Manchester.	Improvements in the manufacture of fabrics in which compounds containing india rubber are used.
671	,,	THOMAS WILLIAM MILLER, of Her Majesty's Dockyard, Portsmouth.	Improvements in blocking or securing ships and other vessels whilst being removed, examined, or repaired.
672	17th March, 1859.	COLEMAN DEFRIES, of the firm of Jonas Defries and Sons, Houndsditch.	Improvements in lamps.
673	,,	CHARLES GARNETT, of the firm of Peter and Charles Garnett, of Cleckheaton, in the county of York, Machine Makers.	Improvements in machinery for ginning cotton, and for cleaning cotton and certain other fibrous materials.
676	,,	RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the city of London, E.C., Patent Agent.	Treating barley so as to obtain new alimentary substances therefrom.
678	,,	ANDREW GEORGE HUTCHINSON, of West Derby, in the county of Lancaster, Builder.	Improvements for counteracting damp in buildings.
679	,,	PH. LAROCHETTE, ainé, of Paris, in the empire of France.	Improvements in machinery for brewing.
680	,,	ALEXANDER MEIN, Glass Bottle Maker, at Saint Rollox, Glasgow, in the county of Lanark.	Improvements in making glass bottles, and in the apparatus connected therewith.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
681	17th March, 1859.	Arthur Warner, of 31, Threadneedle Street, in the city of London, and William Henry Tooth, of Sumner Street, Southwark, in the county of Surrey.	Improvements in the manufacture of iron.
684	18th March, 1859.	William Bowers Taylor, of Ballamena, in the county of Antrim, in Ireland, Gentleman.	Certain improvements in or applicable to looms for weaving.
690	„	Robert Mushet, of Coleford, in the county of Gloucester, Metallurgist.	A new or improved metallic alloy.
693	„	Charles Lambert, of Sunk Island, in the county of York, Farmer.	Improvements in corn and seed drills.
694	„	John Wallace Duncan, of Grove End Road, St. John's Wood, and James Eglinton Anderson Gwynne, of Hanover Terrace, Regent's Park, both in the county of Middlesex, Gentlemen.	Improvements in or connected with apparatus for the generation, application, and condensation of steam, part of which apparatus or arrangements is applicable to other purposes.
696	19th March, 1859.	William Bruce Gingell, of 37, Corn Street, in the city of Bristol, Architect.	Improvements in the form of metal bars used for the stiles, rails, heads, and sills of window sashes, casements, and other lights.
700	„	John Walter Hart, of 60, St. Mary Axe, in the city of London, Gentleman.	An apparatus for the destruction of flies and other insects.
705	„	Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improvements in propelling vessels.
709	21st March, 1859.	William Hudson, of Burnley, in the county of Lancaster, Machinist, and Christopher Catlow, of the same place, Overlooker.	Certain improvements in looms for weaving.
714	„	Joseph Bickerton, of Oldham, in the county of Lancaster, Machinist.	Improvements in opening and securing window sashes.
715	„	George Gregg, of Sheffield, in the county of York, Currier.	Improvements in currying or manufacturing leather.
717	„	William Rhodes, of Wade Street, Thornton Road, Bradford, in the county of York, Whitesmith.	Certain improvements in fire-proof safes.
719	22nd March, 1859.	John Davis, of No. 18, Frith Street, Soho, in the county of Middlesex, Professor of Music.	Improvements in musical instruments.
724	„	John Talbot Pitman, of the American and European Patent Offices, No. 67, Gracechurch Street, London.	Improvements in springs for railroad cars and for other purposes.
725	„	Edward Maynard, of the city of Washington, in the district of Columbia, and United States of America.	Improving breech-loading fire-arms.
726	„	Samuel Newington, of Ridgway, Ticehurst, in the county of Sussex, M.D.	Improvements in apparatus for distributing seeds and manure.
727	„	Daniel Lancaster Banks, of Kennington, in the county of Surrey, Engineer.	Improvements in suspension rail or roadways, and in machinery or apparatus connected therewith.
728	„	William Pickford Wilkins, of Ipswich, in the county of Suffolk, Engineer.	Improvements in the arrangements of valves, and in their application to steam-engines.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
729	22nd March, 1859.	Sir Peter Fairbairn, of Leeds, in the county of York, Knight, and Robert Newton, of Leeds, aforesaid, Commercial Traveller.	Straightening and separating the fibres of silk waste and laying them in parallel lengths preparatory to combing or dressing.
731	,,	Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E. C., Patent Agent.	Improvements in fire-arms and ordnance, and in projectiles and apparatuses to be employed therewith.
732	,,	Jacobus Tyssen, of Rotterdam, in the kingdom of Holland, Mariner.	An improved apparatus for indicating the speed of ships and other vessels.
734	,,	John Macintosh, of North Bank, Regents Park, Gentleman, and Godfrey Rhodes, of Regent Street, Major in Her Majesty's Army.	Improvements in tents and such like coverings for shelter against the weather.
735	23rd March, 1859.	Samuel Oram, of No. 137, Fleet Street, in the city of London.	Improvements in pipes or tubes for generating and super-heating steam.
736	,,	William Adamson, of the Patent Slip Wellington Quay, Newcastle-on-Tyne.	Improvements in apparatus for propelling vessels.
738	,,	William Middleship, of Grove Terrace, South Grove, Mile End, in the county of Middlesex, Officer of Her Majesty's Customs.	Improvements in propelling vessels.
739	,,	John Evans, of Nash Mills, in the parish of King's Langley, in the county of Hertford, Paper Maker.	Improvements in the manufacture of paper.
740	,,	Benjamin Browne, of No. 52, King William Street, London Bridge, in the city of London, and county of Middlesex, Civil Engineer and Patent Agent.	A new method of working or operating switches and signals on railways by improved apparatus for that purpose.
742	,,	George Neal, Gas Chandelier and Fitting Manufacturer, of Great Charles Street, Birmingham, in the county of Warwick.	Certain improvements in apparatus or fittings connected with the burning of gas for regulating and economising its consumption.
745	,,	Pierre Paul Boll, of Paris, in the French empire, Gentleman, and Hermann Reger, of Cologne, Gentleman.	Improvements in steam-boiler and other furnaces.
747	24th March, 1859.	William Garforth and James Garforth, both of Dukinfield, in the county of Chester, Engineers.	A certain improvement in metallic pistons.
748	,,	William Edward Wiley, of 34, Great Hampton Street, Birmingham, in the county of Warwick, Gold Pen and Pencil Case Manufacturer.	Improvements in the manufacture of boxes or cases used for holding needles, pens, matches, pencils, and for other like purposes.
750	,,	Frederick Edward Sharp, of 3, Gloucester Terrace, Blackheath, in the county of Kent.	Improvements in machinery for corking bottles.
752	,,	Charles Sanderson, of Sheffield, in the county of York, Merchant.	Improvements in preparing, tempering, and covering or coating thin strips or sheets of steel.
753	,,	William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent.	A machine for separating oats from their husks or chaff.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
754	25th March, 1859.	Hugh Rigby, of Salford, in the county of Lancaster, Engineer.	Improvements in machinery or apparatus for obtaining motive-power, applicable to hoists and all other purposes to which motive-power can be applied.
756	,,	Richard Baker, of Liverpool, in the county of Lancaster, Watch Maker.	Improvements in chronometers, watches, and other time keepers.
757	,,	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman.	Improvements in fire-arms.
758	,,	William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in ovens for baking bread and other substances.
763	26th March, 1859.	Elizabeth Steane, of Manor Rise, Brixton, in the county of Surrey, Widow.	An improved means or apparatus for preventing candles dropping or guttering.
767	,,	John Campbell Evans and Peter Soames, of the Morden Iron Works, East Greenwich, in the county of Kent, Engineers.	Improvements in apparatus for superheating steam.
770	,,	Benjamin Smith and Charles Lavers Smith, both of Corbet's Court, Spitalfields, in the county of Middlesex, Manufacturing Chemists.	Improvements in the preparation of certain colouring matter, applicable for dyeing and printing.
771	,,	Joseph Buckley, of Horwich, in the county of Lancaster, Calico Printer, Orlando Greenhalgh, of the same place, Manager, and Robert Hutchinson, of the same place, Mechanic.	Improvements in machinery or apparatus for printing woven fabrics.
772	28th March, 1859.	Charles James Richardson, of No. 34, Kensington Square, and of No. 9*a*, King Street, Whitehall, both in the county of Middlesex, Architect.	Improvements in apparatus to be applied to chimnies or flues of buildings for preventing down draught or return smoke, for their insuring upward ventilation, and for reducing the quantity of smoke or the blacks from the smoke passing into the atmosphere.
774	,,	James Buckingham, of Westmoreland House, Walworth Common, in the county of Surrey, Civil Engineer.	Improvements in machinery or apparatus employed in drawing fibrous substances.
779	29th March, 1859.	Charles Lewis Roberts, of Clerkenwell, in the county of Middlesex.	Improvements in cigars.
785	,,	Richard Searle, of Woodford Wells, in the county of Essex, Gentleman.	Improvements in apparatus used for transmitting signals by electricity for telegraphic purposes, and in the construction of telegraphic cables.
788	,,	Henry Potter Burt, of Charlotte Row, Mansion House, in the city of London.	Improvements in apparatus for preparing and preserving timber.
789	,,	Henry Moss, of 62, Brill Row, Somers Town, in the county of Middlesex, Boot and Shoe Manufacturer, and Thomas West, of 5 Jewin Street, in the city of London, Machinist.	A machine for the cutting of leather for every purpose, and cutting cloths, linen, and other fabrics and materials.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
790	30th March, 1859.	Walter Brown, of Bolton-le-Moors, in the county of Lancaster, Clog Manufacturer.	Improvements in manufacturing clog soles, and in the machinery employed therein.
792	,,	John Wilson Hadwen, of Kebroyd Mills, in the parish of Halifax, and West Riding, of the county of York, Cotton Spinner.	A new art or manufacture for converting certain kinds of silk waste into yarns or threads.
797	,,	John Cartwright, of Shrewsbury, in the county of Salop, Agricultural Implement Manufacturer.	An improved implement for crushing clods, and pulverizing the surface soil, also convertible into a press wheel roller.
801	,,	William Smith, of King Street, Smithfield, in the city of London, and Edward Smith, of Hamburgh, Gas Meter, Manufacturers.	Improvements in means or apparatus for the purpose of regulating the flow or passage of fluids.
802	31st March, 1859.	John Lacy, Cotton Spinner, and Samuel Simpson, and Henry Smith, Managers, all of Travis Holme, Mill Wallsden, near Todmorden, in the county of Lancaster.	Certain improvements in machinery for preparing and spinning cotton and other fibrous materials.
805	,,	Thomas Ivory, of Edinburgh, Advocate.	Improvements in rotary engines.
807	,,	Alexander Morton, of Morton Place, Kilmarnock.	Improvements in sextants or quadrants for nautical purposes, and which are also adapted to the measuring of altitudes, or angular distances.
811	,,	William Edward Newton, of the office for Patents, 66 Chancery Lane, in the county of Middlesex, Civil Engineer.	Improvements in mills for cleaning rice.
812	,,	Alfred Vincent Newton, of the office for Patents, 66 Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improvements in the construction of steam boiler and other furnaces.

A List of the Letters Patent for Inventions which have become Void by reason of the Nonpayment of the additional Stamp Duty of £100 before the expiration of the Seventh Year from the date of such Patents, pursuant to the Act of the 16th Vict. c. 5, sec. 2,—for the Quarter ending the 31st day of March, 1862.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
5	1st Jan., 1855.	Stephen Giles, of Caledonian Road, Islington, in the county of Middlesex, Engineer.	An improved ratchet brace.
8	2nd Jan., 1855.	Henri Louis Dormoy, Merchant, of Paris, in the French empire.	Certain improvements in manufacturing and twisting silk, cotton-wool, and other fibrous substances.
10	,,	Claude Jules Fincken, Glass Merchant, of No. 36, in the Rue d'Echiquier, at Paris, in the empire of France.	Preserving without loss of heat all windows, glass roofs, false roofs, &c, from the effects of condensation and damp, and also from the effects of external smoke, soot, and dust.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
21	3rd Jan., 1855.	Alexander Southwood Stocker and Samuel Darling, both of No. 11, the Poultry, Cheapside, in the city of London, Manufacturers.	Certain improvements in the manufacture of bottles, pots, jars, tubes, and other receptacles, part of which improvements are applicable to various other purposes for commercial and domestic use.
31	5th Jan., 1855.	Robert Ashworth, of Rochdale, in the county of Lancaster, Engineer, and Samuel Stott, also of Rochdale, in the county of Lancaster, Cotton Spinner.	Improvements in machinery for preparing, spinning, and doubling fibrous substances.
35	6th Jan., 1855.	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of Glasgow, North Britain, Gentleman.	Improvements in machinery or apparatus for effecting agricultural operations, parts of the said improvements being applicable for the obtainment of motive-power for general purposes.
42	8th Jan., 1855.	William Grindley Craig, of Gorton, near Manchester, in the county of Lancaster, Engineer.	Improvements in railway buffer cases and rams.
63	10th Jan., 1855.	William Thomas Henley, of St. John Street Road, London, Electric Telegraph Engineer and machinist.	Improvements in steam boilers or generators, and in apparatus in connection therewith.
66	,,	Henry Bessemer, of Queen Street Place, New Cannon Street, in the county of Middlesex, Engineer.	Improvements in the manufacture of iron and steel.
67	,,	Henry Bessemer, of Queen Street Place, New Cannon Street, in the county of Middlesex.	Improvements in the construction and manufacture of ordnance.
71	11th Jan., 1855.	John Norton, of Dublin, in the county of Dublin, Ireland, Esquire.	Improvements in draining land.
85	12th Jan., 1855.	Christopher Turner, of Burnley, in the county of Lancaster, Weaver.	Certain improvements in power-looms for weaving.
88	,,	William Barningham, of Salford, in the county of Lancaster, Iron Manufacturer.	Improvements in connecting the rails of railways.
95	13th Jan., 1855.	Gustav Warnecke, of Frankfort-on-the-Maine, Merchant.	Improvements in preserving vegetables and fruits.
99	,,	John Charles Pearce, of the Bowling Iron Works, in the county of York, Engineer.	Improvements in machinery or apparatus for the manufacture and working of iron and other metals.
114	16th Jan., 1855.	James Lee Norton, of Holland Street, Blackfriars, in the county of Surrey.	Improvements in recovering the wool from fabrics composed of wool, or wool in connection with cotton or other vegetable substance.
115	,,	Jonathan Saunders, of St. John's Wood, in the county of Middlesex.	An improvement in the manufacture of axles and shafting.
116	,,	Jean Antoine François Victor Oudin, of Mons, department of Seine and Marne, in the empire of France, and of 4, South Street, Finsbury, London, Priest.	A new liquid for preventing sea sickness.
123	17th Jan., 1855.	David Davidson, of Meiklewood by Stirling, North Britain, Captain in the Honourable East India Company's Service.	Improvements in apparatus for pointing ordnance and restoring the aim of the piece either by day or night when it is once obtained.
170	22nd Jan., 1855.	William Kilgour, of Liverpool, in the county of Lancaster, Merchant.	An improved manufacture of naptha, paraffine, and paraffine oil.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
173	23rd Jan., 1855.	Frederic Prince, of No. 3, South Parade, Chelsea, in the county of Middlesex.	Improvements in cartridges for fire-arms.
182	24th Jan., 1855.	John Livesey, of New Lenton, in the county of Nottingham, Lace Manufacturer.	Improvements in lace machinery.
187	25th Jan., 1855.	Barnett Samuel, of Sheffield, in the county of York, Comb Manufacturer.	Improvements in the manufacture of knife handles, umbrella, and stick handles, door knobs, articles of furniture, and other articles having the appearance and transparency of solid tortoiseshell.
196	26th Jan., 1855.	John Lamacraft, of Westbourne Grove, in the county of Middlesex, Engraver.	Improvements in envelopes or means for securing letters, notes, and similar documents.
200	„	Joseph Leese junior, of Manchester, in the county of Lancaster, Manufacturer.	Certain improvements in the process of printing calicoes and other textile fabrics.
227	30th Jan., 1855.	David Moline, of Adelaide Place, in the city of London, Merchant.	Improvements in the manufacture of metallic window frames and sky-lights.
234	31st Jan., 1855.	Arthur Lyon, of Windmill Street, Finsbury, in the county of Middlesex, Sausage Machine Manufacturer.	An improvement in sausage making or mincing machines.
237	„	James Howard, of Bedford, Agricultural Implement Maker.	Improvements in ploughs.
240	„	John Francis Porter, of Bessborough Street, in the county of Middlesex, Civil Engineer.	Improvements in the manufacture of bricks and other articles of clay or brick earth.
258	3rd Feb., 1855.	Edmund Clegg, of Shore Mill, near Littleborough, in the county of Lancaster, and James Leach, of the same place, Manufacturers.	Improvements in temples for looms.
263	5th Feb., 1855.	Godfrey Pattison, of the city of Glasgow, in the county of Lanark, Merchant.	Improvements in machinery for dressing and finishing woven goods or fabrics.
265	„	John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of Glasgow, North Britain, Gentleman.	Improvements in the manufacture or construction of steam boilers or generators, and in the application of materials to such manufacture.
286	7th Feb., 1855.	William Warbrick, of Dukinfield, Machine Maker, and John Walker, of Compstall Bridge, near Stockport, Mechanic, both in the county of Chester.	Certain improvements in machines for preparing, spinning, doubling, warping, and dressing cotton, wool, and other fibrous substances.
302	8th Feb., 1855.	Frederick Ransome, of Ipswich -	Improvements in drying articles made of plastic materials.
308	9th Feb., 1855.	William Beckett Johnson, of Manchester, in the county of Lancaster, Manager for Messrs. Ormerod and Son, Engineers.	Improvements in steam boilers and engines.
313	10th Feb., 1855.	Edward Sparkhall, of 142, Cheapside, in the city of London, Printer.	Improvements in the exhibition of pictorial representations of various subjects.
316	„	George Hallen Cottam and Henry Richard Cottam, of St. Pancras Iron Works, Old St. Pancras Road.	Improvements in the construction of iron buildings.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
321	10th Feb., 1855.	GEORGE RENNIE, of Holland Street, in the county of Surrey, Engineer.	Improvements in marine steam engines.
327	12th Feb., 1855.	RICHARD SHIRLEY HARRIS, of Leicester, Gentleman.	Improvements in the manufacture of looped fabrics.
328	,,	JOHN FOSTER, of Long Eaton, in the county of Derby, Machine Builder.	Improvements in machinery for the manufacture of lace.
331	13th Feb., 1855.	AUGUSTE VALLERY, of Rouen, empire of France, and of 32, Essex Street, Strand, London, Civil Engineer.	An improved machinery for the preparation of flax, hemp, and other textile materials.
335	14th Feb., 1855.	JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of Glasgow, North Britain, Gentleman.	Improvements in governors or regulators for steam engines or other prime movers.
346	15th Feb., 1855.	CHRISTOPHE FRANÇOIS DELABARRE, of Paris, in the empire of France, and of 32, Essex Street, Strand, London.	Improved apparatus to be used in propelling gases and forcing liquids.
361	17th Feb., 1855.	JOHN OXLEY, of Beverley, in the county of York, Coach Builder and Wheel Manufacturer.	Improvements in machinery for making wheels or the various parts of which wheels are composed.
367	20th Feb., 1855.	DAVID HULETT, of Holborn, in the county of Middlesex.	Improvements in apparatus for heating, cooking, and lighting by gas.
374	,,	FREDERICK BLACKET EDWARD BEAUMONT, of Upper Woodball, Barnsley, in the county of York, Lieutenant Loyal Engineers.	Improvements in fire-arms called "Revolvers."
390	21st Feb., 1855.	CHARLES LOW, of Bodowen, Dolgelly, North Wales, Gentleman.	Certain improvements in the extraction of gold from its ores.
398	23rd Feb., 1855.	WILLIAM HARTCLIFFE, of Salford, in the county of Lancaster, Machinist, and JOSEPH WATERHOUSE, of the city of Manchester, Manager.	Certain improvements in looms for weaving.
400	,,	JOHN NORTON, of Dublin, in the county of Dublin, Ireland, Esquire.	Improvements in the construction of cartridges for fire-arms.
402	,,	WILLIAM HENRY ZAHN, of 13, Norfolk Street, Strand, London.	Certain improvements in windmills.
408	24th Feb., 1855.	VICTOR JOSEPH LEBEL, of Paris, JEAN FOURNIOL, also of Paris, Printers, and JEAN BAPTISTE REMYON, also of Paris, Merchant.	Improvements in typographic presses.
413	,,	JOHN SCOTT RUSSELL, of Mill Wall	An improvement in the construction of ships or vessels to facilitate the use of water as ballast.
418	26th Feb., 1855.	AUGUSTE EDOUARD LORADOUX BELLFORD, of 32, Essex Street, Strand, London, Patent Agent.	Certain improvements in the manufacture of soda.
421	,,	CHARLES HENRY ROBERTS, of 3, Cornwall Road, Stamford Street, Lambeth, in the county of Surrey.	An improvement in the manufacture of rubbers for painters and others.
422	,,	THOMAS NASH, junior, of 134, Great Dover Road, in the parish of Saint Mary, Newington, in the county of Surrey, Brush Manufacturer.	Improvements in painting brushes, applicable also to other brushes and to brooms.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
436	28th Feb., 1855.	Jesse Brickles and Thomas Thorpe, Manufacturers, and Joseph Lillie, Engineer, all of the city of Manchester.	Improvements in the manufacture of plain and ornamental woven fabrics.
453	1st March, 1855.	Thomas Sadleir, of Mulla Tullamore, Esquire.	An improved apparatus and method of manufacturing charcoal, which can also be applied to cooking and other purposes.
466	2nd March, 1855.	William George Henry Taunton, of Liverpool, in the county of Lancaster, Civil Engineer and Patent Windlass Purchase Manufacturer.	Improvements in pumps, pump gear, and pump buckets.
468	„	John Coney, of Newhall Hill, Birmingham, in the county of Warwick, Gun Maker.	An improved construction of gun lock.
481	3rd March, 1855.	Charles Iles, of Peel Works, Birmingham, in the county of Warwick, Manufacturer.	Improvements in the manufacture of tubes, knobs, and handles of doors, rollers of castors, and reels for cotton and thread.
486	5th March, 1855.	Andrew Hotchkiss, of the city of New York, United States of America.	Improvements in projectiles.
488	„	Arsène Louis Garnier, of the Island of Guernsey, Photographic Artist.	An improved process for producing photographic pictures, which he intends to denominate "Système Garnier de Photocherographie Coloriée."
489	„	John Lewis, of Elizabethtown, in the state of New Jersey, United States of America.	Improvements in rigging and sparring vessels.
522	8th March, 1855.	John Norton, of Dublin, in the county of Dublin, Ireland, Esquire.	Improvements in fire-arms and ammunition.
525	„	Julian Bernard, of Club Chambers, Regent Street, in the county of Middlesex, Gentleman.	Improvements in the manufacture of boots and shoes, or other coverings for the feet, and in the machinery or apparatus to be employed therein.
534	9th March, 1855.	Samuel Cunliffe Lister, of Manningham, near Bradford, in the county of York.	Improvements in treating and preparing the fibres of flax and hemp, and other fibrous substances for spinning.
547	12th March, 1855.	Joseph Malcomson, of Portlaw, in the county of Waterford, in Ireland, Merchant, and Robert Shaw, of the same place, place, Merchant, and William Horn, of Mark Lane, in the city of London, Engineer.	Improved expansion valves for steam engines.
567	14th March, 1855.	Benjamin Goodfellow, of Hyde, in the county of Chester, Engineer.	Improvements in regulating the power for driving the pumps of dydraulic presses.
568	„	Robert Neale, of Cincinnati, in the United States of America, and of No. 17, Cornhill in the city of London, Copperplate Printer.	Improvements in copper and other plate printing.
570	„	William Galloway and John Galloway, of Manchester, in the county of Lancaster, Engineers.	Certain improvements in balancing or regulating the pressure on the slide valves of steam-engines.
572	„	Edward Vincent Gardner, of 24, Norfolk Street, Middlesex Hospital, in the county of Middlesex, Professor of Chemistry.	Improvements in furnaces, ashpits, flues and fireplaces, whereby smoke is prevented, fuel more perfectly consumed, and its heating value greatly economized.

No. of Register.	Date of Patent.	Name and Address of Patentee.	Title of Invention.
581	14th March, 1855.	WILLIAM LISTER, of Dunsa Bank, near Richmond, in the county of York, Farmer.	An improved implement for raising or loosening turnips and other roots in the ground, and cutting off the tails thereof.
584	15th March, 1855.	ROBERT MORE BUTT, of Fairfield Works, Bow, in the county of Middlesex.	Improvements in the manufacture of night-lights.
591	16th March, 1855.	WILLIAM HILL, of Birmingham, in the county of Warwick, Tool Maker.	Improvements in metallic pens and penholders, and in ornamenting metallic pens and penholders.
616	19th March, 1855.	RICHARD EDWARD HODGES, of Southampton Row, in the county of Middlesex, and CHARLES MURRAY, of Manor Place, Walworth, in the county of Surrey.	Improvements in door springs.
630	20th March, 1855.	ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Mechanical Draughtsman.	Improved machinery for forming moulds for casting.
645	23rd March, 1855.	FREDERICK RANSOME, of Ipswich -	An improvement in the manufacture of artificial stone.
661	26th March, 1855.	JOHN BRITTEN, of Birmingham, in the county of Warwick, Engineer.	A new or improved machine for sweeping or cleaning chimneys.
662	„	GEORGE ALLAM BARRETT, WILLIAM EXALL, and CHARLES JAMES ANDREWES, all of Reading, in the county of Berks.	Certain improvements in portable and fixed combined thrashing machines.
668	„	FRANCIS CROSSLEY, M.P., of Halifax -	Improvements in the manufacture of mosaic rugs.
708	30th March, 1855.	WILLIAM SWAIN, of Birmingham, in the county of Warwick, Gentleman.	Certain improvements in furnaces for japanners' stoves, ovens, boilers, and kilns, and which improvements are also applicable to other fireplaces, by which combustion is rendered more complete, and the fuel thereby greatly economized.
710	„	GEORGE H. BABCOCK and ASHER M. BABCOCK, of Westerly, in the state of Rhode Island, in the United States of America.	Improvements in presses for printing in colours called "Polychromatic printing presses."
711	„	MANNING PRENTICE, of Stowmarket, and THOMAS RICHARDSON, of Newcastle-on-Tyne.	Improvements in the manufacture of manures.
712	„	JOSEPH MORGAN, of Manchester, Manufacturer of plaited wicks.	An improvement in the manufacture of candles in which tallow is used.

FOREIGN PATENTS.

BELGIUM.*

List of Patents of Invention Delivered on the 30th April, 1862.†

(Communicated by the Belgian Government.)

(For previous List, see No. 866 of this Journal.)

12,427. F. J. Bouwens, of Brussels, for "A desk with an apparatus for turning over leaves."—Dated 9th April, 1862.

12,428. M. F. Denier, represented by D. De Vos-Verraert, of Brussels, for an imported invention of "Manufacture of seamless legs of half boots."—Dated 9th April, 1862.— (French Patent, 3rd April, 1862.)

12,429. Fauvel, sen., jun., and Co., represented by D. De Vos-Verraert, of Brussels, for an imported invention of "Means of preventing gas escapes."—Dated 9th April, 1862.—(French Patent, 26th March, 1862.)

12,430. G. M. and E. Morgan, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in carriages."—Dated 9th April, 1862.—(English Patent, 18th January, 1862.)

2,431. G. Chauveau, represented by H. Biebuyck, of Brussels, for an imported invention of "A thread case."—Dated 9th April, 1862.—(French Patent, 29th January, 1862.)

12,432. N. De Maklakoff, represented by H. Biebuyck, of Brussels, for an imported invention of "A continuous cylinder chain for conveyance."—Dated 9th April, 1862.— (French Patent, 4th April, 1862.)

12,433. L. Farrenc and H. Gloesener, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "A gas carburator with burners and wicks."—Dated 9th April, 1862.—(Original Patent, 10th January, 1862.)

12,434. N. J. Dor, of Amptin-Huy, for "A furnace with vertical retorts for the manufacture of zinc and white of zinc."—Dated 9th April, 1862.

12,435. F. Nicolai, of Verviers, for "A machine for extracting fat and liquid substances from fabrics."—Dated 11th April, 1862.

12,436. Ad. Houget and Ch. Teston, of Verviers, for "A cover with internal hinges, applicable to the pedestals of carding machines."—Dated 11th April, 1862.

12,437. A. Van Opstal and Co., of Molenbeek St. Jean, for "Manufacture of bleached wicks of candles."—Dated 10th April, 1862.

12,438. J. H. Marland, represented by X. Raclot, of Brussels, for an imported invention of "A continuous apparatus for rolling iron and other metals."— Dated 10th April, 1862. — (French Patent, 23rd September, 1861.)

12,439. J. Sabbe, of Pottes-Celles, for "A churn."—Dated 12th April, 1862.

12,440. E. Boucqueau, of St. Josse-ten-Noode, for "Iron stop planks."—Dated 11th April, 1862.

12,441. J. Fontvieille, represented by F. Clavareau, of Brussels, for an imported invention of "Improvements in the mechanism of double and other trigger-plates of fire-arms."—Dated 11th April, 1862.—(French Patent, 29th March, 1862.)

12,442. A. Ford, represented by A. Van Cutsem, of Brussels, for an imported invention of "Manufacture of impervious fabrics combined with paper, &c."—Dated 11th April, 1862.—(English Patent, 8th October, 1861.)

12,443. P. R. Couchond, represented by A. Calvet, of Brussels, for an imported invention of "A machine for the manufacture of chenille and other lace work."—Dated 11th April, 1862.—(French Patent, 31st March, 1862.)

12,444. L. Faconnet, represented by A. Calvet, of Brussels, for an imported invention of "A system of tiles."—Dated 11th April, 1862.

12,445. J. B. Passedoit, represented by A. Crooy, of Brussels, for an imported invention of "Improvements in the manufacture of iron and steel."—Dated 11th April, 1862.—(French Patent, 26th March, 1862.)

12,447. P. Delpy, of Schaerbeek, St. Josse-ten-Noode, for "A pump with a compensating pipe."—Dated 12th April, 1862.

12,448. H. Halkett and J. H. Lacroix, of Brussels, for "A process for preserving, scouring, and cleaning wool."—Dated 12th April, 1862.

12,449. Couvreux and Combe, represented by H. Biebuyck, of Brussels, for an imported invention of "A raising apparatus with a rotary gin."—Dated 12th April, 1862.—(French Patent, 21st October, 1861.)

12,450. J. M. H. P. Metivier, represented by H. Biebuyck, of Brussels, for an imported invention of "A multiple pump with a continuous action and crank movement."—Dated 12th April, 1862.—(French Patent 4th February, 1862.)

12,451. A. C. Ponceau, represented by H. Biebuyck, of Brussels, for an imported invention of "Self-acting horse."—Dated 12th April, 1862.—(French Patent, 9th April, 1862.)

12,452. E. Clément, represented by H. Biebuyck, of Brussels, for an imported invention of "A harvesting machine with an apparatus for binding the corn in sheaves."—Dated 12th April, 1862.—(French Patent, 8th April, 1862.)

12,453. C. Garcia Saëz, represented by H. Biebuyck, of Brussels, for "A breech-loading fire-arm."—Dated 12th April, 1862.—(French Patent, 21st February, 1862.)

* For the Belgian Patent Law, see Nos. 292 and 348 of this Journal.

† All Specifications of Patents which have been in force not less than six months, may be inspected or translations of them be had at the Library of the Great Seal Patent Office, where also translated Indexes may be consulted

12,454. Th. Gilot and J. B. Haut, of Farciennes-Charleroi, for "A machine for cutting and polishing marble."—Dated 15th April, 1862.

12,455. A. Philips, of Eceloo, a Patent of Improvement for "A churn."—Dated 10th April, 1862.—(Original Patent, 25th April, 1861.)

12,456. Th. John Cockerill and Co., represented by A. Joassart, of Seraing, for "Improvements in machines for bending wheel-tyres."—Dated 10th April, 1862.

12,457. Th. John Cockerill and Co., represented by A. Joassart, of Seraing, for "A system of hammering wheel-tyres,"—Dated 10th April, 1862.

12,458. Th. John Cockerill and Co., represented by A. Joassart, of Seraing, for "Improvements in the heads of hammers and in anvils for the manufacture of wheel-tyres."—Dated 10th April, 1862.

12,459. A. Hennequin and A. Movillon, of Liége, for "A process for improving pig-iron and wrought-iron, and for converting the same into steel."—Dated 15th April, 1862.

12,460. L. Perard, of Liége, for "A frame for vertical saws with an oblique motion for cutting wedges according to the grain of the wood."—Dated 17th April, 1862.

12,461. A. Delcambre, represented by A. Carton de Wiart, of Brussels, for an imported invention of "A system of fire-boxes for locomotives and boilers."—Dated 14th April, 1862.—(French Patent, 16th October, 1860.)

12,462. F. Metsers, of Ixelles, for "A harvesting and mowing machine."—Dated 14th April, 1862.

12,463. J. and H. H. Butterworth, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in apparatus for heating air, water, and other fluids."—Dated 14th April, 1862.—(French Patent, 9th April, 1862.)

12,464. W. H. Bailey, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in sewing machines."—Dated 14th April, 1862.—(French Patent, 9th April, 1862.)

12,465. W. Tongue, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in carding machines."—Dated 14th April, 1862.—(French Patent, 24th March, 1862.)

12,466. J. M. Worrall, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in gigs."—Dated 14th April, 1862.—(French Patent, 9th April, 1862.)

12,467. F. Million, represented by H. Biebuyck, of Brussels, for an imported invention of "An interior mode of heating atmospheric engines or machines worked by elastic fluids in general."—Dated 14th April, 1862.—(French Patent, 8th March, 1861.)

12,468. A. Hawksey, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the suspension of curtains."—Dated 14th April, 1862.—(French Patent, 9th April, 1862.)

12,469. J. Sidebottom, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in projectiles."—Dated 14th April, 1862.—(French Patent, 7th April, 1862.)

12,470. C. M. Beziat, represented by X. Raclot, of Brussels, for "A jack with an endless screw for domestic purposes."—Dated 14th April, 1862.—(French Patent, 7th April, 1855.)

12,471. C. T. Porter, represented by A. Crooy, of Brussels, for "Improvements in steam indicators." Dated 15th April, 1862.

12,472. C. Maus, of Vieux-Virton-Virton, for "Railway crossings of cast-steel."—Dated 15th April, 1862.

12,473. J. B. De Mulder, of Brussels, for "A thrashing machine."—Dated 16th April, 1862.

12,474. J. M. Ciroux, of St. Josse-ten-Noode, for "Improvements in the mechanism of Dutch blinds."—Dated 16th April, 1862.

12,475. F. B. Houghton, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in apparatus for reducing straw and other vegetable substances in the manufacture of paper-pulp."—Dated 16th April, 1862.—(English Patent, 14th October, 1861.)

12,476. H. Halkett and J. H. Lacroix, of Brussels, of "An instantaneous and dry process for scouring wool."—Dated 16th April, 1862.

12,477. L. Amenc, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in lubricating axles, arbors, &c."—Dated 16th April, 1862.—(French Patent, 5th September, 1861.)

12,478. O. Von Knorring, represented by H. Biebuyck, of Brussels, for an imported invention of "Gas furnaces for welding barrels of fire-arms and other iron and steel articles."—Dated 16th April, 1862.—(W. Fellenius' Swedish Patent, 15th January, 1860.)

12,479. Sheureux, Brothers, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of looped fabrics."—Dated 16th April, 1862.—(French Patent, 12th April, 1862.)

14,480. D. Marchal, of Brussels, a Patent of Improvement for "Means and processes for preventing the injurious vibration produced by the traffic on railways and common roads."—Dated 16th April, 1862.—(Original Patent, 22nd February, 1862.)

12,481. E. G. Sigur, represented by X. Raelot, of Brussels, a Patent of Improvement for "Applying reversed tracings of chromographies and printing on all kinds of articles."—Dated 17th April, 1862.—(Original Patent, 4th January, 1862.)

12,482. V. Chabre, alias L'Eclair, of St. Josse-ten-Noode, for a Patent of Improvement for "A mode of obtaining full speed in carriages and small boats."—Dated 17th April, 1862.—(Original Patent, 20th January, 1862.)

12,483. O. Bolle, of Chatelet-Charleroi, for "A kind of paving"—Dated 18th April, 1862.

12,484. Schoetter, Brothers and Sisters, of Chatelineau-Charleroi, for "Metallic railway sleepers."—Dated 18th April, 1862.

12,485. L. Rousseau, of Liége, for "A mathematical machine for rivetting pinions of watches."—Dated 18th April, 1862.

12,486. E, Goriet, of Seraing, for "A system of collecting the gas of blast furnaces."—Dated 19th April, 1862.

12,487. Averlant-Danel, represented by C. A. Bouchez, of Brussels, for an imported invention of "Manufacture of paper-pulp."—Dated 18th April, 1862.—(Pavy's French Patent, 7th October, 1861.)

12,488. A. Dansaert, of Uccle-Ixelles, for "A brick machine."—Dated 18th April, 1862.

12,489. E. Lemmens, represented by L. Hallett, of Molenbeek St. Jean, for "A kitchener."—Dated 18th April, 1862.

12,490. M. Bonneaventure, of Dison-Verviers, for "A system of shuttle boxes for Jacquart looms."—Dated 19th April, 1862.

12,491. A. F. J. De Borman, of Liége, for "Breech loading fire-arms."—Dated 22nd April, 1862.

12,492. G. H. C. Voss, represented by D. Herode, of Schaerbeek, for "A rotary steam engine."—Dated 19th April, 1862.

12,493. A. Rinbaux, of Brussels, for "Economical fuel."—Dated 19th April, 1862.

12,494. A. K. Johnston and L. Dow, represented by L. Anoul, of Ixelles, for an imported invention of "Improvements in the manufacture of cartridges."—Dated 19th April, 1862.—(English Patent, 8th October, 1861.)

12.495. J. B. Delrieu, represented by A. Calvet, of Brussels, for an imported invention of "Improvements in the manufacture of acierated rails."—Dated 19th April, 1862.—(French Patent, 26th February, 1862.)

12,496. C. M. Bathias, represented by W. H. Kirkpatrick, of Ixelles, for an imported invention of "A system of forked wheels placed one above the other, with unequal axles."—Dated 19th April, 1862.—(French Patent, 24th March, 1862.)

12,497. V. Duprat, represented by F. Anthoine, of Brussels, for an imported invention of "A machine for compressing bricks, flagstones, &c."—Dated 19th April, 1862.—(French Patent, 21st June, 1861.)

12,498. C. E. Gray, represented by F. Anthoine, of Brussels, for "An apparatus for melting, purifying, and discharging fat and oleaginous substances."—Dated 19th April, 1862.—(French Patent, 11th October, 1861.)

12,499. De Clercq and Co., of Ixelles, a Patent of Improvement for "An apparatus for feeding steam boilers."—Dated 22nd April, 1862.—(Original Patent, 5th November, 1861.)

12,500. L. E. Gerber, of Brussels, for "Using moulds of caoutchouc and gutta percha in the manufacture of objects of baked clay."—Dated 22nd April, 1862.

12,501. Nugues and Denimol, of St. Gilles, Ixelles, for "Manufacture of native sugar, and extracting the residues therefrom."—Dated 22nd April, 1862.

12,502. J. Webster, represented by H. Biebuyck, of Brussels, for an imported invention of "Improvements in the manufacture of oxigen and other gaseous products."—Dated 22nd April, 1862.—(English Patent, 19th October, 1861.)

12,503. F. Buvert, represented by H. Biebuyck, of Brussels, for an imported invention of "An apparatus for protecting persons from flames in fire."—Dated 22nd April, 1862.—(French Patent, 22nd March, 1859.)

12,504. T. Hughes, represented by H. Biebuyck, of Brussels, for an imported invention of "A high pressure cock."—Dated 22nd April, 1862.—(French Patent, 16th April, 1862.)

12,505. S. Davey, represented by H. Biebuyck, of Brussels, for "Improvements in the manufacture and use of gun-powder for mining."—Dated 22nd April, 1862.

12,506. Hassebroucq, Brothers, represented by H. Biebuyck, of Brussels, for an imported invention of "A trellis thread ball."—Dated 22nd April, 1862.—(French Patent, 15th January, 1862.)

12,507. C. L. Ruquois, represented by H. Biebuyck, of Brussels, for an imported invention of "An insulating mode of coating heated surfaces of machines."—Dated 22nd April, 1862.—(French Patent, 21st December, 1861.)

12,508. A. G. Moufflet, represented by H. Biebuyck, of Brussels, a Patent of Improvement for "An apparatus for drying and baking cereals, roots, and other plants."—Dated 22nd April, 1862.—(Original Patent, 4th December, 1861.)

12,509. A. Leroy, of Brussels, for "Improvements in sewing machines."—Dated 22nd April, 1862.

12,510. J. P. V. Le Rouge and J. H. C. De Berly, represented by A. Crooy, of Brussels, for "An arrangement of screws, and applying the same to vessels as a means of safety."—Dated 23rd April, 1862.—(French Patent, 16th April, 1862.)

12,511. Ed. De Ryckere, of Courtrai, for "A machine for mixing and triturating ceramic paste."—Dated 23rd April, 1862.

12,512. D. Miedel, jun., of Gembloux-Namur, for "A churn."—Dated 23rd April, 1862.

12,513. S. Deltour, alias Rosnis, of Seraing, for "A system of cocks."—Dated 23rd April, 1862.

12,514. N. J. Lejeune, of Namur, for "A powder for polishing metal, glass, and crystal."—Dated 24th April, 1862.

12,516. D. Ebbinghaus, of Charleroi, for "A system of ventilation in various metallurgical and other furnaces."—Dated 26th April, 1862.

PRUSSIA.*

List of Patents Delivered and Annulled between the 1st and 31st March, 1862.

(*Communicated by His Excellency the Minister of Commerce and Public Works.*)

1. Patents Delivered.

1. Franz Joseph Graf, of Haaren, for a Patent of Prolongation of 3 years, for "A machine for pointing needles."—Dated 4th March, 1862.—(Original Patent, 13th December, 1857.)
2. Witte, of Iserlohn, for "A machine for grinding needles."—Dated 13th March, 1862.
3. Kaspar Trinks, of Helmstedt, for "Controlling scales for weighing beetroot in sugar works."—Dated 23rd March, 1862.
4. Ludwig Robert Sagelsdorff, of Stettin, for "An apparatus for taking in thimbles in the manufacture of sails."—Dated 27th March, 1862.

2. Patents Annulled.

1. A. F. Von Arnim, of Gerswalde, for "A steam generator."—Dated 7th August, 1860; annulled 5th March, 1862.
2. J. H. F. Prillwitz, of Berlin, for "An apparatus in looms for guiding the thread on bobbins."—Dated 19th December, 1860; annulled 5th March, 1862.
3. Friedrich Henckel, of Bochum, for "An expansion apparatns for oscillating steam engines."—Dated 18th September, 1860; annulled 21st March, 1862.

* For the Prussian Patent Law, see Nos. 313 and 329 of this Journal.

FIRE-ARMS, PROJECTILES, &c.—The series of Specifications and Drawings on this Subject, from 15th May, 1718, to 31st December, 1853, with Alphabetical and Subject-matter Indexes, may be obtained at the cost price of 9*l.* 18*s.* 6½*d.*

The Indexes, separately, price 3*s.*

REAPING MACHINES.—The entire series of Specifications and Drawings on this subject to the end of 1853, together with an Appendix, prepared by B. Woodcroft, of the Patent Office, and published under the sanction of the Commissioners, may be obtained at the cost price of 2*l.* 3*s.* 11½*d.*

UNITED STATES OF AMERICA.

(*Communicated by the Commissioner of Patents.*)

List of Patents, with Claims annexed, issued from the United States Patent Office, for the week ending 15th April, 1862, and each bearing that date.

No. 34,933. William Ackerman, of Flint, Michigan, for an "Improvement in machines for cutting trees and logs."

"I claim the combination of the crank shaft H, *h*, gear wheel I, sliding frame C, *c*, E, F, ribbed shaft D, and rotary cutter G, constructed, arranged, and operating substantially as and for the purposes explained."

No. 34,934. M. L. Baker, of Mannsville, N.Y., for an "Improvement in machines for gathering and binding grain."

"I claim the arrangement of the bar B, and teeth *e*, passing through said bar with the head *c*, link *f*, treadle D, curved bars E, and frame A, as herein shown and described."

No. 34,935. E. F. Bassett, of Seymour, Conn., for an "Improved mattress."

"I claim an endless mattress B, constructed substantially as shown and described."

No. 34,936. Wm. Boynton, jr., of Auburn, N.Y., for an "Improvement in churns."

"I claim the stationary shaft A, in combination with the double arms *e*, *e*, the revolving shafts *k*, *k*, and the cross bars *h*, *h*, *h*, *h*, operated as herein fully set forth and described."

No. 34,937. James R. Bradley, of Ironton, Ohio, for an "Improvement in converting cast iron into wrought iron and steel."

"I claim the use of the several substances set forth in the foregoing specification substantially in the order, manner, and relative qualities set forth, for the purpose of more effectually and thoroughly converting cast iron into malleable iron or steel, as stated respectively."

No. 34,938. Joseph W. Briggs, of Cleveland, Ohio, for an "Improved stitching machine."

"I claim the combination of the eye-pointed needle A, the vibrating arm C, strap D, and treadle with a feed mechanism, when the several parts are constructed and arranged as described and for the purposes set forth."

No. 34,939. Edwin R. Brown, of Chicago, Ill., for an "Improvement in ticket recorders."

"I claim the combination of the hand rod *a*, drum *g*, index l^1, bell *v*, and ticket receiver *c*, c^2, or their equivalents, constructed, arranged, and operating substantially as and for the purposes set forth."

No. 34,940. John W. Brown, of New York, N.Y., for a "Letter box."

"I claim, 1st, the valve F, in combination with the chamber E, cylinder D, B, and semi-cylinder C, the cylinder being provided with the openings *a*, *b*, and all arranged for joint operation as and for the purpose herein set forth. 2nd, the toothed or serrated edge *n*, of the opening *a*, of cylinder B, when used in connection with the semi-cylinder C, and cylinder D, provided with the chamber E, and valve F, for the purpose specified."

No. 34,941. HIRAM BURK, of Mineral Point, Ohio, for an "Improvement in mining drills."

"I claim, first, the combination of post A, drill C, and its rocking and feeding journal D, substantially as set forth. Second, the combination of the holding cap or head piece E, screw drill C, with its rocking and feeding journal D, with the post or stand A, said parts being arranged to operate in relation to each other, as and for the purposes set forth."

No. 34,942. WILLIAM B. BURNS, of East Saginaw, Mich., for an "Improvement in saw mills."

"I claim the vertical rods G, G, and gibs or cross pieces H, H¹, connected and arranged as shown to form the saw-gate or sash, in combination with the two carriages L, L, and the adjustable gaug saws I, placed at each side of the gate, and fitted in the gibs as shown, for the purpose herein set forth."

No. 34,943. CHARLES CHINNOCK, of Brooklyn, N.Y., for an "Improvement in beer measures."

"I claim, 1st, the use of a float to separate the liquid from the foam, in combination with a beer measure, substantially as described. 2nd, the application of an index to the float in the same combination by which the quantity of liquid in the can is accurately indicated and measured independent of the froth."

No. 34,944. WILLIAM A. CLARK, of Bethany, Conn., for an "Improvement in bullet moulds."

"I claim the mode of operating the cut-off of bullet moulds, made to slide longitudinally by a lever, substantially as and for the purposes set forth."

No. 34,945. SAMUEL S. CROCKER, of Lawrence, Mass., for an "Improvement in machinery for cleansing paper pulp."

"I claim the combination of the large and small receptacles, arranged to operate together substantially as set forth, for the purpose specified."

No. 34,946. JOHN DILLINGHAM, of Turner, Maine, for an "Improvement in wood saw frames."

"I claim the combination and arrangement of the dogs or catches K, L, with the double saw-frame when constructed and operated in the manner and for the purpose specified."

No. 34,947. JOSEPH DITTO, of New York, N.Y., for an "Improved water-proof coating for cloth, felt, &c."

"I claim, combining india-rubber and the residuary gum separated from stearine to form a water-proof coating for the purposes herein described."

No. 34,948. F. N. DUBOIS, of Chicago, Ill., for an "Improved machine for amalgamating gold."

"I claim, first, the conical feed valve C, with its attached water pipe 1, substantially as described, and for the purpose set forth. Second, I claim the swinging vibratory sluice D, possessing the distinctive feature of its being swung upon the centre, from which the bottom of the sluice is struck, substantially as described, and for the purpose set forth. Third, I claim the use of conical feed valve C, and sluice D, in combination with cylinder A, for the purpose of completing a new and useful process in amalgamating gold, substantially as described and set forth."

No. 34,949. WILLIAM H. DUTTON, of Utica, N.Y., for an "Improvement in skates."

"I claim, 1st, a skate provided with a runner A, having its bottom or face of convex, a transverse section of which is a section of a circle, and provided with longitudinal blades or edges *a*, at a suitable distance apart, and extending its whole breadth or width, substantially as described. 2nd, the pawl or hold-fast C, applied to the skate, substantially as shown and described, to operate as and for the purpose herein set forth."

No. 34,950. CHARLES T. JAMES, of Providence, R.I., for an "Improvement in expanding sabots for hot shot."

"I claim the making of a case for firing hot shot, with an expansible packing ring, or the equivalent thereof, in combination with a cavity, or the equivalent thereof, at the forward end, so that it can be connected with a hot shot, substantially as and for the purpose specified."

No. 34,951. ALBERT A. FREEMAN, of Philadelphia, Pa., for an "Improvement in portable sewing thread spool holders."

"I claim a portable spool-holder, consisting of the attaching pin (f^3), the spring stem (f^{11}), the spring plate (*d*), and arm (*e*), the same being arranged and combined together, substantially in the relation to each other, described and set forth, for the purpose specified."

No. 34,952. CARLOS FRENCH, of Seymour, Conn., for an "Improvement in corrugated spiral car springs."

"I claim a car or carriage spring wound into a spiral form, and having corrugations running in the direction of the spiral, said corrugations being formed in the plate in advance of the winding, by which means I produce a much lighter spring without detracting from its strength, substantially as described."

No. 34,953. CONRAD FURST, DAVID BRADLEY and JOHN LACY, of Chicago, Ill., for an "Improvement in horse rakes."

"We claim, the slide and socket M, and P, arranged in combination with the rake head and axle, in the manner, and for the purpose specified."

No. 34,954. CURTIS GOODWIN, of New Brunswick, N.J., for an "Improved cord winder."

"I claim, the post, with gudgeon and cap made with a tapering square so as to adjust itself to a variety of sizes of balls or rolls of twine, rope, and cordage, substantially as set forth in this specification, and the annexed drawings."

No. 34,955. JOHN S. GAGE and P. D. BECKWITH, of Dowagiac, Mich., for an "Improvement in seeding machines."

"I claim, 1st, the lever G, slotted plate *o*, fulcrum pin *a*, pin *n*, vibrating lever E, connecting rods *d*, *d*, friction arms *b*, *b*, friction rollers *c*, *c*, with the cam surface J, and driving wheel B¹, when combined and arranged to operate in the manner and for the purpose set forth. 2nd, forming the ends of the hub *m*, of each furrow wheel of unequal diameter, and having the small end of the hub of one wheel fitted to work within a recess in the large end of the hub of the adjoining wheel, in combination with the axle C, substantially as described for the purpose set forth."

No. 34,956. ISAAC M. HARSHBARGER, of Brandonville, Va., for an "Improvement in the manufacture of soap."

"I claim the employment or use of gum ammoniac and burnt copperas when the same are mixed together with borax, spirits of hartshorn, sal, soda, water, and ordinary hard or soft soap, substantially in the manner and for the purpose herein shown and described."

No. 34,957. JOHN HAWORTH, of Manchester, England, for an "Improvement in street railways."

"I claim, the employment, in combination with each other of the flat grooved central rail *c*, the adjustable guide wheel C, running within said rail, and the flat rails *a*, *a*, as herein shown and described."

No. 34,958. JOHN HEATON, of Flushing, N.Y., for an "Improvement in raising or lifting weights."

"I claim, 1st, the lever A, formed of two parts *a*, *b*, connected by a joint B, arranged as shown to admit of a rope E, passing through it, and to clamp the rope as the lever descends, and to release the rope and slip over it as the lever is raised, for the purpose specified. 2nd, the combination of the lever A, rope E, upright C, and base plate D, all constructed and arranged for joint operation as and for the purpose set forth."

No. 34,959. DANIEL HEILIG, of Nebraska city, Nebraska territory, for an "Improvement in stoves."

"I claim the combination with a stove and furnace constructed and operated as above described, of the metal coils shown in Figure 9, the concentric boilers with their steam pipes shown in Figure 5, the water reservoir D, and the baker shown in Figure 6, the whole being combined and operated together substantially as set forth."

No. 34,960. Robert C. Helm, of New Brunswick, N.J., for an "Improved method of producing diagonal cloth."

"I claim the method herein described of preparing or producing what is known as diagonal cloth (or cloth in which the threads of the warp and weft are caused to occupy a position diagonal to each other), by the use of two rollers, one of which is placed obliquely to the other, or by the use of two parallel rollers, when the cloth passes from one to the other in an oblique direction, substantially in the manner described."

No. 34,961. Selah Hiler, of Harlem, N.Y., for an "Improvement in the manufacture of gun barrels."

"I claim manufacturing barrels for muskets, rifles, or other hand fire arms of iron or steel, by the combined operations, substantially as specified."

No. 34,962. Daniel Holmes, of Chelsea, Mass., for an "Improvement in rolling or frictionless journals."

"I claim, first, the enlarging of the ends of the rollers C, C^1, C, C^1, so that the velocity of their peripheries shall be just sufficient to secure a rolling motion on the inside of the flanges D, D^1. Second, the combination of the flanges D^1, D, and the enlarged ends of the spool from rollers C, C^1, C, C^1, (to secure a rolling motion), by means of which the principal rollers B, B^1, B^{11}, &c. are held in place, substantially as and for the purpose herein set forth."

No. 34,963. Wm. H. Hoyt, of Bethel, Conn., for an "Improvement in application for felting hats."

"I claim, 1st, the adjustable endless apron B, and pressure or feeding plate K, with or without roller Q, in connection with a rubbing cylinder or rotary rubber S, arranged for joint operation, substantially as and for the purpose set forth. 2nd, the peculiar construction of the rubbing cylinder or rotary rubber S, as herein shown and described, to wit, having plates *k* of segment form hinged to flanches *m*, or their equivalents, on a rotary shaft, and acted upon by springs *n*, in order to give the necessary pressure intermittingly to the hat body, as set forth. 3rd, the combination of the inclined board or chute T, with the adjustable apron B, rubbing cylinder or rotary rubber S, and pressure or feeding plate K, as and for the purpose specified."

No. 34,964. Henry C. Hutchinson, of Cayuga, N.Y., for an "Improvement in lamps."

"I claim the device of a perforated guard or screen to be placed upon or within the central flue of a kerosene lamp, by which the lamp is better enabled to hold the flame."

No. 34,965. Charles T. James, of Providence R. I., for an "Improvement in sabot for explosive shells."

"I claim a case for firing spherical shells, which case is formed with a cavity in the forward end for receiving and holding the shell, and provided with expansible packing on its periphery, to be expanded by the force of the discharge, in combination with a hole or holes, or equivalent passage through from the cavity for the shell to and through the rear end, all substantially as and for the purpose described."

No. 34,966. A. S. Jones, of Joliet, Ill., for an "Improvement in mill stone picks."

"I claim the head B, having recesses *b*, in the upper or outer surfaces of its lips *a*, the spring E, strap C, provided with the screw D or its equivalent, and the cutters F, provided with the projections *h* at their inner ends, all being combined and arranged substantially as and for the purpose set forth."

No. 34,967. George Jones, of Peekskill, New York, for an "Improved window sash adjuster."

"I claim the combined application of the curved metallic spring, rod and gauge, constructed in grooves in the sides of the window sash, to the moving and adjusting of the sash within the frames, by means of which both the upper and lower sash may be moved up and down in the frame at pleasure."

No. 34,968. C. L. Kelling, of Mechanicsburgh, Penn., for an "Improvement in coffee-roasters."

"I claim the sliding legs *s*, in combination with the hasps a^1, projections t^1, t^2, and cylinder *a*, substantially in the manner and for the purpose specified. I claim in combination with the cylinder or vessel *a*, and its bottom *p*, the enlarged rim *q*, having ventilating passages *r*, therein, in the manner and for the purpose set forth."

No, 34,969. Solomon Kepner, of Pottstown, Penn., for an "Improved paddle wheel."

"I claim the combination of the pivoted buckles G, G^1, latches I, I^1, cam J, and pins H, K, L, M, arranged and operating in the manner and for the purposes herein-before set forth."

No. 34,970. George F. Kolb, of Philadelphia, Penn., for an "Improvement in camera obscuras."

"I claim a box A, of any suitable form with the lens tube B, on one side, and the eye tube K, on the opposite side in combination with the two reflectors G and F, arranged in respect to each other and to the eye and lens tubes substantially as and for the purpose herein set forth."

No. 34,971. Thomas S. Lambert, of Peekskill, N.Y., for an "Improvement in military and civic bed-frames."

"I claim, 1st, the combination of the elastic bands *x*, with the nonelastic bands P, substantially as set forth. 2nd, the application of the buckles S, in combination with the bands, for the purpose of regulating their position and condition, substantially as set forth. 3rd, the construction and application of the cross-pieces B, C, and the plates to which they are attached, substantially as set forth. 4th, the mode of varying and fastening the head supports and legs in position, in combination with the frame, substantially as set forth."

No. 34,972. Geo. G. Lobdell, of Wilmington, Delaware, for an "Improvement in cast metal car wheels."

"I claim, 1st, securing the tire or rim B to the rim *c*, of the wheel A, by means of the bolts *g*, passing through the rim *c*, and the inner periphery of the tire or rim B, and having holes *j*, made in the sides of the tire or rim B, to turn the nuts *i*, as herein set forth. 2nd, counterbalancing the wheel by pouring melted lead or other suitable metal into the chamber *e*, when said metal counterbalance is used or employed with the braces *f*, arranged as set forth. 3rd, the combination of the hollow wheel A, and the hollow tire B, when both are constructed, arranged, and secured together as and for the purpose herein set forth."

No. 34,973. A. J. Luckey, of Bradford, Wis., for an "Improvement in machines for cutting the bands of grain."

"I claim the circular metallic disk C, having its periphery cut in the form shown and described, when used in combination with the tubular sleeve or guard B, in the manner and for the purposes set forth and described."

No. 34,974. Alexander McFarlane, of South Genesse, Wis., for an "Improved device for cutting marshy land."

"I claim the oblique cutter bars *b*, *b*, arranged substantially as shown to admit of the adjusting of the cutters C, in a vertical and in an oblique position, for the purpose set forth."

No. 34,975. A. McKissick, of Jordan, N.Y., Charles M. French, of Weedsport, N.Y., for an "Improved apparatus for renovating feathers."

"We claim, 1st, the combination of the rotating feather receiver A, of polygonal or other form, in combination with the central steam tube B, tubular journals C, C^1, steam eduction tubes G, provided with the perforated distributing cylinders H, and the valves E, E^1, arranged for joint operation, substantially as and for the purpose herein set forth. 2nd, the tubular plug *g*, and close plug *h*, when used in connection with the steam tube B, and with or without the valves E, E^1, for the purpose specified. 3rd, the waste tubes F, F, applied to the steam tube B, as shown, in relation with the feather receiver A, for the purpose set forth."

No. 34,976. Henry C. Nicholson, of Mount Washington, Ohio, for an "Improved cover for fruit jars."

"I claim the arrangement of beveled neck B, *b*, cover C, ears D, *d*, ring F, and a suitable gasket, the whole being combined and operating substantially as described."

No. 34,977. Wm. Ostrander, Isaac D. Reeder, and Joseph Corduan, of Brooklyn, N.Y., for an "Improvement in the construction of ordnance."

"We claim constructing a cannon by winding wire around a tube which has a breech piece inserted, and binding the whole together by casting metal upon it, in the manner and for the purposes substantially as set forth."

No. 34,978. Roswell L. Peabody, of New York, N.Y., for an "Improvement in watches."

"I claim the combination of the unlocking pin (*c*) with the prongs of the lever, and of the impulse pin (*d*) with the notches in the roller, in the manner and for the purposes substantially as set forth. I also claim the manner of securing the hair spring to the regulator by means of the fixed and sliding pieces (*m*) and (*n*), between which it may be firmly clamped, as set forth. I also claim the use or employment of the cylindrical and self-adjusting stud (*k*), when said stud is secured upon the underside of the cock of the balance, in the manner substantially as set forth. I also claim constructing the staff by making it in two parts, upon one of which the roller, &c. is fitted, and upon the other the pins are turned, for the purposes and in the manner substantially as described. I also claim the supplementary shaft (*s*), in combination with the gear of the centre shaft for setting the hands, as set forth."

No. 34,979. Christian Peters, of Wadsworth, Ohio, for an "Improvement in shells for ordnance."

"I claim the herein-described construction of ordnance projectiles, the same being charged with leaden bullets, as specified, and provided with an interior magazine of powder by which the projectile itself is instantly exploded after the discharge of the bullets, as herein set forth."

No. 34,980. Abiel Pevey, of Lowell, Mass., for an "Improvement in casting gas retorts."

"I claim the flask constructed as described when combined with the carriage or truck and its arm J, and brace L, pins K and O, or their equivalents, in the manner described, for giving all the required movements and positions to the flask with the greatest ease and precision, for the purposes fully set forth."

No. 34,981. James Platt, of Utica, N.Y., for an "Improvement in rotary engines."

"I claim the arrangement in combination with the rotating cylinder, the stationary abutment, head, and hollow stationary shaft E, of the two-branched induction and eduction pipes Q, *q*, q^1, and R, *r*, r^1, and cocks q^*, q^{1*}, and r^*, r^{1*}, communicating with the separate passages *m*, m^1, of the hollow stationary shaft, all substantially as and for the purpose herein set forth."

No. 34,982. John L. Race, of Port Washington, Wis., for an "Improvement in mode of sustaining and protecting couplings of shafting."

"I claim the box B, fitted within the case A, and resting on the adjustable support *b*, and slide *h*, all being combined and arranged substantially as and for the purpose herein set forth."

No. 34,983. George G. Ray, of Boston, Mass., for an "Improvement in pen holders."

"I claim my improved pen holder as made with a metallic or non-elastic guard C, arranged between the handle A, and the elastic or rubber pen supporter B, the whole being constructed and applied together as and for the purpose set forth."

No. 34,984. Joseph Ridge, of Richmond, Ind., for an "Improvement in coal oil lamps."

"I claim, first, the mechanical device M, constructed substantially in the manner and for the purpose herein set forth. Second, I claim the diaphragm D, made and applied as described. And, third, I claim the combination of the device M, diaphragm D, and short chimney C, constructed and arranged substantially in the manner shown in fig. 1, and for the purpose herein described."

No. 34,985. Henry C. Sergeant, of Cincinnati, Ohio, for an "Improvement in Gas Regulators."

"I claim the application of an adjustable screw placed in one end of the key of a gas lock so arranged as to control the amount of opening in the key, as specified in the foregoing specification."

No. 34,986. Wm. H. Seymour, and Aaron Palmer of Brockport, N. Y., for an "Improvement in rakes for harvesters."

"We claim, first, the combination in an automatic rake, for a harvesting machine, of the following elements, viz., 1, a post or standard capable of turning freely in its bearings; 2, an arm secured rigidly to the post, and capable of traversing only in a plane perpendicular to it; 3, a stationary cam on said arm. 4 a rake head capable of revolving freely round said arm; in a plane perpendicular to it. 5, a roller carried by the arm to which the rake head is attached and capable of yielding freely in its bearings to traverse over the stationary cam, and hold the rake head in the proper position; 6, a tripping lever upon the rod which carries the rake head; and 7, suitable stops or detents upon the front and rear of the platform, to raise and depress the rake at the proper moment; the whole operating substantially in the manner described. Second, the combination of the stationary cam *h*, upon the end of the vibrating arm which carries the rake with the yielding roller *i* upon the rake rod when operating substantialiy in the manner described, for the purpose of holding the rake head up during its forward movement, and of pressing it down firmly upon the grain when raking off. Third, the combination of the stationary cam *h*, the yielding roller *i*, and the tripping lever I^1, substantially in the manner and for the purpose specified. Fourth, the combination of the yielding roller *i* with the rake rods I, as herein described for the purpose set forth."

No. 34,987. Christian Sharp, of Philadelphia, Penn., for an "Improvement in metallic cartridge."

"I claim the metallic cartridge case composed of the hollow cylinder A, with a base *a*, of such a strength as to effectually resist the shock to which it is subjected, and of such a thickness that an orifice may be formed in the solid metal of the base for the reception of the detonating compound and a rod or wire for exploding the same, as herein set forth for the purpose specified."

No. 34,988. John C. Smith, of Troy, N.Y., for an "Improvement in sewing machines."

"I claim the fingers R, stirrup (V), spool box B^1, and spool W, in combination with feed bar S, arms T, U, *p*, cam (*r*), on cross-head Q, needle (*f*), and sewing plate C^1, arranged in the manner and operating for the purposes as herein fully described and shown."

No. 34,989. John E. Smith, of New York, N.Y., for an "Improvement in electro-magnetic telegraphs."

"I claim the employment, in combination with the lever C, of the sounder or register, of a second electro-magnet F, F, which is brought into action by the recoil of the armature of the relay magnet, substantially as and for the purpose herein specified."

No. 34,990. James Spear, of Philadelphia, Penn., for an "Improvement in ash sifters."

"I claim the combination of the ash seive A, drawer B, box C, with the removable frame D, when applied to the hearth of a stove, and constructed to operate substantially as described."

No. 34,991. Chester D. Stevens, of Mendota, Illinois, for an "Improvement in apparatus for evaporating saccharine juices."

"I claim the arrangement and construction of the boiling and evaporating pans in relation to each other and to the steam boiler C, substantially in the manner described."

No. 34,992. J. W. Sykes, of Chicago, Ill., for an "Improvement in floating grain elevators and dryers."

"I claim combining with an elevating apparatus arranged upon a scow or other floating vessel, an interposed drying apparatus (Wheeler's Patent of October 23d, A.D. 1860, or any other), the whole forming a 'floating grain dryer and elevator,' capable of transferring grain from one vessel to another, or from a vessel to a storehouse, or vice versâ, and of drying the grain while in the process of being transferred; and the whole apparatus capable of being easily floated from one locality to another, as may be required, for the purpose of elevating and drying the grain."

No. 34,993. Alexander C. Twining, of New Haven, Conn., for an "Improvement in apparatus for making ice."

"First: I claim the combination of the following four things, or any combination substantially the same, viz: The cooling vessel (as B,B, *t*, *t*, F, F); the exterior liquid in (A, A, A,) cooled by contact with the preceding, as above; the pump (C) or other equivalent means by which the said liquid leaves (A, A, A,) and returns; also a containing vessel or vessels in which or upon whose contents said liquid it is to perform its congealing or refrigerating work. Second, I claim the employment, in combination, of a freezing liquid shifted progressively by means of a hose, or of pipes, valves, or cocks, substantially as above described, from one part to another of a trough or vat with freezing vessels contained therein, so as to create substantially what is above denominated 'the progressive circuit of cold currents;' also I claim the vat, with its troughs, pipes, valves and cocks, such as may be necessary, or any combination or construction substantially the same for effecting that circuit. Third, I claim the following four parts in combination for a generator B, B, *t*, *t*, F, F, of cold; viz. The opening or pipe (S) for introducing the liquid or solution from which vapor or gas is to expand and produce the cold; the pipes or narrow compartments (*t*, *t*, *t*,) down which the above is to flow by gravity, in thin sheets of liquid; the lower compartment (F, F,) opening into the pump (D) for removing residuum; and the exterior liquid in (A, A, A,) cooled and made to circulate, all substantially as above described."

No. 34,994. Allen Walton, of Philadelphia, Pa., for an "Improvement in apparatus for mixing gases."

"I claim combining a chamber or reservoir A, with Crutchett's patent gas meter, the said chamber being so situated that both the air and gas must pass into and be mixed intimately together in the said chamber prior to escaping to the distributing pipes."

No. 34,995. Walter A. Wood, of Hoosick Falls, N.Y., for an "Improvement in harvesters."

"I claim uniting the extension bar to the shoe, by means of a socket and pin, so as to underlie the finger bar, that is also united to said shoe, substantially as described. I also claim the tongue plate T, provided with a sleeve *k*, and sockets *l*, *l*, or seat supports, cast in one piece as herein described and represented, and for the purpose stated."

No. 34,996. R. V. De Gunon, of Hudson, N. Y., and Geo. W. Barclay, of Brooklyn, N. J., assignors to John A. Newbold, of New York, N. Y., for an "Improvement in presses."

"First, the bending device fig 10, the shank 8, being made fast in the plunger D^1, fig. 2, by means of the pin 12, and having a spiral spring 3, or its equivalent, working on and around the shank of the fixed bender 8, and pressing against the bottom of the plunger D^1, to keep the movable part of the bender E, E, parallel to the bottom of the fixed bender 8, except when bending the middle of the blank, and working in combination with the blank carrier F, and bending bar H, as substantially set forth. Second, the bending bar H, and blank carrier F, working simultaneously with each other, and in combination with the bending die 19, the whole being constructed and arranged and operated as substantially described. Third, we claim the air chamber 41, in bolster A, (figs. 17 and 19), the small holes 42 being drilled through the partition 17, for the purpose of drawing the blank down upon the said partition by means of an exhaust pump or its equivalent as herein specified."

No. 34,997. D. R. Frazer, of Chicago, Ill., assignor to himself, P. W. Gates, and Thomas Chalmers, of same place, for an "Improvement in valves for steam-engines."

"I claim, 1st, the combination and arrangement of the suspended and universally moving balance block E, gravitating frame or packing D, D, and platform C, of slide valve, substantially in the manner and for the purposes described. 2nd, the vertical bolt F, with spherical seat on its lower end for suspending the balancing mechanism of the valve, substantially in the manner and for the purpose described. 3rd, the combination of the vertical pins I, with spherical ends, and the bolt F, F^1, and balancing mechanism, substantially in the manner described. 4th, The combination of the springs, bolt F, F^1, pins I, and balancing mechanism, substantially in the manner and for the purpose described. 5th, the combination of the slotted wedge J, inclined projection K, connecting arm M, retaining nuts *c*, *c*, and valve B, substantially in the manner and for the purpose described."

No. 34,998. Francis N. Frost, of New Britain, Conn., assignor to himself and Henry Haskins, of same place, for an "Improvement in coal sifters."

"I claim the fulcrum guide *n*, *s*, door *o*, in combination with a shifter *i*, substantially in the manner and for the purpose described."

No. 34,999. Abner S. Harding, of Mount Hope, N.Y., assignor to himself and A. S. Dodge, of same place, for an "Improvement in machines for raking and binding grain."

"I claim, 1st, the rotating rake for gathering up and presenting the grain to the clamp, in combination with the clamp when they are constructed and operated substantially as described. 2nd, the combination of means herein recited' or their equivalents, for seizing the straw to form the band from the box, and passing it around the grain in the clamp. 3rd, the combination of means, or their equivalents, for forming the band and securing it around the grain in the clamp, and completing the sheaf, substantially as set forth. 4th, I claim the arrangement of the lever (c^{11}), the side rod (f^{11}), and the plate (h^{11}), having the hole (g^{11}) for holding the rakes shaft, as and for the purpose described."

No. 35,000. John Magee, of Chelsea, Mass., assignor to Norton Furnace Company, of Norton, Mass., for an "Improvement in cooking stoves."

"I claim my peculiar arrangement of the ash chamber and the oven chute with reference to the hearth, the horizontal grate and the oven, the said ash chamber being constructed with an opening, and such opening being provided with one or more doors, all substantially as specified and represented."

No. 35,001. J. L. Jones, of St. Louis, Missouri, assignor to himself aad W. D. Porter, of U. S. Navy, for an "Improved defensive armor for water and land batteries."

"I claim, 1st, metallic plates as the defensive armor of ships and land batteries when the plates have a flange at the edges and have intermediate flanges; and when the plates are applied in two or more tiers or thicknesses so as to form recesses between them, and also when the plates otherwise are constructed and applied substantially as and for the purposes set forth. 2nd, the combination of armor plates which have a flange at each edge, and intermediate flanges, and are applied as described, with divided elastic cushions, substantially in the manner and for the purpose set forth. 3rd, the combination of two or more tiers of angle plates constructed and applied as described, with intermediate cushions E, and foundation cushions D, substantially in the manner and for the purpose set forth. 4th, the combination of elastic washer cushions *c*, bolts F, angle plates A, B, constructed and applied as described, cushions E, and casemate or side of a vessel, substantially as and for the purpose described."

No. 35,002. Joseph Short, of Salem, Mass., assignor to Charles Short, of same place, for an "Improved sling for carrying blankets and overcoats."

"As a new article of manufacture I claim the officers over coat and blanket sling, as and for the purpose described."

No. 35,003. Halsey D. Walcott, of Boston, Mass., assignor to Horace Williams, of Brookline, Mass., for an "Improvement in eyelet machines."

"I claim the above described improved eyelet set and punch combined, the piece E, being so pivoted to the jaw C, that when it is revolved the punch *d*, and die *f*, attached thereto, will fall on different parts of the jaw D, substantially as set forth."

No. 35,004. James O. Whitcomb, of Brooklyn, N.Y., assignor to Joseph Dodin, of New York, N.Y., for an "Improvement in sewing needle cases."

"I claim a needle case having a graduated series of compartments, substantially as described. Also in combination therewith the plate Fig. 3, attached to the bottom of the case and turning on the common centre *n*, and having the notch *e*, substantially as described."

No. 35,005. E. H. Williams, of Clermont, Iowa, and D. R. W. Williams, of Werner, Wis., assignors to said E. H. Williams, for an "Improvement in excavating, ploughing, and grading machines."

"We claim, 1st, constructing the endless belts I, M, O, of a series of metallic plates *o*, connected together by joints formed of eyes *p*, which interlock into each other, and are so swaged or formed as to receive their pins *q*, at the inner sides of the belt, whereby the outer surfaces of the plates will be 'flush' with each other, and projections formed at the inner side of the belts to mesh into toothed pulleys or wheels, which are driven by the belts or by which the belts are driven, substantially as herein shown and described. 2nd, the combination of the adjustable part D, of the frame of the machine, with the adjustable caster wheel E, and adjustable plough F, all arranged substantially as shown and described, for the purpose of ensureing a steady movement of the plough at any angle or degree of inclination in which it may work. 3rd, the wheel H, provided with two annular colters *l*, *l*, and two or more annular bars *m*, *m*, in connection with the endless belt I, and endless pressure belt M, arranged in relation with each other and the plough F, to operate as and for the purpose specified. 4th, providing the plough F, with a yielding or elastic mould board *i*, attached to the upper end of the share *d*, and arranged in relation with the belts I, M, to operate as and for the purpose set forth. 5th, the combination of the chains J, J, h^1, h^1, connected to springs and arranged substantially as shown for the purpose of driving or operating the pressure belt M, from the belt I, and preventing the belt M, from being subjected to any undue pressure against the ascending slice of earth, while the chains J, J, are kept sufficiently taut to ensure the perfect operation of the belt M. 6th, the employment of the laterally adjustable rotating colters T, and shares U, arranged and applied to the part D, of the frame of the machine, and used in connection with the wheel H, bolts I, M, and plough F, as and for the purpose herein set forth. 7th, the adjustable discharging spout P, attached to the upper part of the part A, of the frame of the machine, and in relation with the discharge end of the belt O, as and for the purpose herein described. 8th, the rotary beater formed of the rotating shaft S^1, and beaters u^1, arranged in relation with the belt O, to operate as and for the purpose set forth. 9th, the combination of two endless belts I, M, when arranged relatively with each other, a wheel H, without the colters *l*, *l*, and a plough F, so as to serve as elevators to carry up the slice of earth as it is cut by the plough. 10th, the employment or use of a wheel H, provided with annular colters *l*, *l*, when so arranged as to perform the double function of a rotary colter and a driving wheel for operating the endless belt or belts, and other working parts of an excavating machine."

No. 35,006. Suspended.

No. 35,007. Abel Brear, of Sangatuck, Conn., for an "Improved apparatus for discharging liquids from kettles and other vessels."

"I claim the combination of the movable cover B, and discharge pipe C, with a steam or air pipe D, by means of one or more hollow connecting arms or branch pipes E, E, in such manner as to effect the discharge of the vessel to which the cover is fitted by means of steam or compressed air admitted to the said vessel from the said pipe D, through the said hollow connecting arms or branch pipes, substantially as herein specified."

Re-issues.

No. 1301. Israel D. Condit, of Millburn, N.J., assignee of H. L. Randall, of Roxbury, Conn., for an "Improvement in machines for felting hat bodies."—Patented 21st April, 1857.

"I claim a concave bed for the roll of hat bodies to rest and turn in without changing place while being felted, substantially as and for the purpose specified. I also claim, in combination with such a concave bed, the mode of operation of the felting instrument, substantially as and for the purpose specified. I also claim, in combination with such a concave bed, and with the felting instrument, or the equivalent thereof, the means herein described, or the equivalent thereof, for partially resisting the rotation of the roll of hat bodies in the said bed, substantially as and for the purpose specified. And I also claim, in combination with the concave bed and the felter, or their equivalents, the mechanism, or the equivalent thereof, for varying the degree of pressure on the roll, and for free access to the bed for putting in or taking out a roll of hat bodies, as set forth."

No. 1302. Clement Russell, of Massillow, Ohio, for an "Improvement in doubled geared horse Powers."—Patented 1st May, 1855.

"I claim, in connection with doubled geared horse powers, the combined use of a centre pin and moving block for allowing the drive wheel to adjust itself to the pinions with which it works, substantially as herein described."

Extension.

No. 5,509. Aaron Smith, deceased, late of Bloomfield, Mich., for an "Improvement in grain separators.—Patented 11th April, 1848.

"First, I claim the revolving rake, constructed and operating as described, for shaking up and separating the straw and the grain, and carrying the straw through the machine. Secondly, I claim the motion of the screen, in combination with that of the rake, its motion being pendulous, and in revere direction to that of the rake, as described."

Designs.

No. 1563. A. C. Barstow, of Providence, R.I., for a "Design for a gas burner stove."

No. 1564. Caleb W. Palmer, of Troy, N.Y., for a "Design for a cook's stove."

No. 1565. Walter W. Stanard, of Buffalo, N.Y., assignor to Jewett and Root, of same place, for a "Design for a stove."

No. 1566. Walter W. Stanard, of Buffalo, N.Y., assignor to Jewett and Root, of same place, for a "Design for a stove."

List of Patents, with Claims annexed, issued from the United States Patent Office for the week ending 22nd April, 1862, each bearing that date.

No. 35,008. Oliver W. Bayley, of Somerville, Mass., for an "Improvement in breech-loading fire-arms."

"I claim the combination of the breech-piece D, with the cylinder E, which is moved forward after the breech piece is in place, to tighten the joint at the rear end of the barrel, substantially in the manner described."

No. 35,009. J. B. Bowen and James E. Baker, of Madison, Wis., for an "Improvement in harvesters."

"We claim the combination of the two projecting arms E, E, of the rake head, the rake-carrier G, and vertical pivot H, stationary on the frame of the machine, the rake hinging around the rake carrier, and the rake carrier hinged around the pivot, when the rake carrier is so constructed and situated as not to extend over the platform, substantially as and for the purpose herein specified. We also claim the combination of the cam R, which bears the stop Q, with the lever S, and rod *t*, arranged substantially as and for the purpose herein specified."

No. 35,010. Charles P. Brochett, of New Haven, Conn., for an "Improved lamp burner."

"I claim, 1st, the plate F, with cone G, attached, pivoted to the plate E, at the top of the burner, provided with a catch H, and arranged relatively with the wick tube B, to admit of the plate F, with chimney attached, being shoved off from and on the burner for the purpose specified. 2nd, the tube stopper *h* attached to the underside of the plate F, in combination with the cross-bar *i* secured to the plate E, and in such relation with plate F, and cone G, as to elevate plate F, and stopper *h*, and admit of said stopper being raised out of and fitted in tube C, by the movement of plate F, as set forth. 3rd, the tube C, fitted in the burner A, in connection with the movable plate F, arranged sub-

stantially as shown, to cover the tube when the burner is in use and the lamp lighted, and to expose the tube for filling the lamp when the plate F is shoved off from the burner."

No. 35,011. William Burgyes, of Chelsea, Mass., for an "Improvement in sweat bands for hats."

"I claim the above described arrangement and combination of the inelastic and flexile band *e*, with the head lining *b*, and the air space *d*, arranged between the hat body and head lining, and for the purpose as set forth."

No. 35,012. Hiram Clark, of Rochester, N. Y., for an "Improvement in skates."

"I claim the employment in skates of bent (by steaming or boiling) wooden foot-pieces for the purposes set forth."

No. 35,013. Wm. R. Cunningham, Brooklyn, Ohio, for an "Improvement in water elevators."

"I claim the self-regulating brake, composed of the spring 8, 8, 8. the sliding journal box 7, the rubber 11, used in connection with the friction flange 10, the whole being constructed substantially in the manner and for the purpose specified."

No. 35,014. Gregory W. Dechant, of Berrysburg, Penna., for an "Improved rotating meat chopper."

"I claim moving the block A intermittently by means of the cogs *j* on the block A, and the radial cogs 1^2, on the face of the cog wheel I, in combination with the cutters C, K, when these parts are arranged and operated as set forth."

No. 35,015. F. W. Dexter, of Randolph, N. Y., for an "Improvement in box-setters for wheel-hubs."

"I claim a clamp for holding the hub for boring, consisting of the head piece A, cone piece B, screw rods C, and nuts D, substantially as described."

No. 35,016. Wm. Ellmaker and C. Hurst, of Earl Township, Penn., for an "Improvement in carriage brake."

"We claim the arrangement of the jointed lever A, B, the step staple *a*, *b*. and jointed rod F, combined and operated substantially as herein set forth for the purpose specified."

No. 35,017. Joseph O. Farrell, of New York, N. Y., for an "Improvement in wheel vehicles."

"I claim the connecting of the front axle F to the perch or breach B, by means of the two slides E, G, placed respectively on the shafts D, H, and connected with the axle F, substantially as shown, for the purpose herein set forth."

No. 35,018. Howard Gill, of Dedham, Mass., for an "Improved folding bedstead."

"I claim the bedstead A, formed of two parts B, C, connected by hinges and provided respectively with an adjustable head-board *c*, and a fixed foot-board *h*, in connection with the folding or hinged leaves *i*, *j*, attached to the bottom *d*, of the part C, of the bedstead, as and for the purpose set forth. I further claim the combination of the folding bedstead A, leaves *i*, *j*, and trundle-bed D, arranged as herein set forth."

No. 35,019. William W. Gould, of Skowhegan, for an "Improvement in the vent holes of ordnance."

"I claim the combination of the two obliquely arranged flanged tubes B, B^1, having their flanges bevelled as shown at *e*, and the covering plate D, having an aperture *i*, the whole arranged and operating substantially and for the purpose herein set forth."

No. 35,020. Jeremiah Hall, of Granville, Ohio, for an "Improvement in reaction car brakes.

"I claim, 1st, the combination with a rail road car axle of the sleeve E, the ratchet wheels D, D^1, and the drum wheels F, F^1, and pawls I, I^1, substantially as described. 2nd, the combination of the springs R, with the drum wheels F, F^1, the pulleys W, W^1, and chains H, H^1. H^2, substantially as described. 3rd, the combination of the treadle or foot lever M, M^1, levers X, X^1, and their connecting chain and rod, in combination with the stops S, S^1, and for the purpose as herein substantially described. 4th, the combination of the reaction car brake as above claimed, with the friction car brake P, and chain O, as herein described."

No. 35,021. N. D. Hartley and M. S. Morehouse, of Quincy, Ill., for an "Improvement in coffee-pots."

"We claim as an improved article of manufacture a coffee-pot provided with pipes J, H, chamber G, vessel D, strainer E, and box F, and otherwise made, as herein shown and described."

No. 35,022. Jeremiah H. Hascall, of Corunna, Michigan, for an "Improved medicine for miasmatic diseases."

"I claim the composition made of the material substantially as described, and for the purpose set forth."

No. 35,023. A. C. Hoag, of Clinton, Ill., for an "Improved broom."

"I claim the method of fastening brooms to the handles thereof, by means of the plates C and D, connected by the rivets *b*, *c*, and the screw bolts *a*, constructed and operating substantially as set forth."

No. 35,024. Jasper Hoopes, of Philadelphia, Pa., for an "Improved car trucks."

"I claim the combination of the plates E, E, semi-circular projections F, F, frame G, bands *f*, bar H, and guides *g*, with the axles B, C, C, in the manner and for the purpose herein shown and described."

No. 35,025. Sheldon Hull, of Oxford, Conn., for an "Improved washing machine."

"I claim the V-shaped box A, in combination with the swinging bar E, and the plungers G, G^1 attached thereto, and working on the inclined ends *f* of the box, substantially as and for the purpose set forth. I further claim constructing the plungers G, G^1, of a series of parallel plates or strips *c*, the plates or strips *c*, of one plunger G, having their lower edges at right angles with the end *f*, on the box on which their plunger works, and the plates or stripes *c* of the other plunger G^1, having their lower edges forming an acute angle with the end *f*, on the box on which their plunger works, substantially as and for the purpose specified."

No. 35,026. Lucinda Humphrey, of Tipton, Iowa, for an "Improvement in skirt protectors."

"I claim a skirt protector, made substantially as described, and of any waterproof material, in combination with the lower portion of the petticoat."

No. 35,027. M. J. Knox, of Knox Corners, N.Y., for an "Improved clothes frame."

"I claim a clothes frame composed of the three conjoined, but independent and separable frames A, B, F, G, with arms J, constructed, combined, and operating as herein shown and described."

No. 35,028. Thomas S. Lambert, of Peekskill, N.Y., for an "Improvement in shirts."

"I claim a shirt with the bosom detached from the body at both sides, a part of the length downward from the upper extremity of the bosom, and opening and closing as a flap, the shirt body and band being open in front beneath the bosom, the band of the shirt and the band of the bosom either or both being kept in place by elastic bands or cords, the whole substantially as set forth."

No. 35,029. William A. Lighthall, of New York, N.Y., for an "Improvement in potable water condensers."

"I claim the combination with the drip reservoir A, and dip plate E, of the series of cooling tubes B, arranged and operated, as and for the purpose herein set forth."

No. 35,030. James W. Lyon, of Brooklyn, N.Y., for an "Improvement in padlocks."

"I claim, 1st, combining with the shackle two separate and independent sets of tumbler catches, one set to lock the heel, and the other set to lock the front of the shackle when arranged so as to overlap each other in such manner as that the key shall come in direct contact with each of them at a point intermediate between their respective fulcra or pivots, and by raising them up release them from the shackle, as described. 2nd, I claim in combination the grooves *g*, in the dogs *a*, and the flanges or pins on the projecting part of the heel of the shackle, substantially as and for the purpose described. 3rd, I claim in combination the projecting part of the heel of the shackle, and the tails or detectors of the dogs *c*, which take into the staple, or front of the shackle, substantially as and for the purpose described."

No. 35,031. J. S. Mashall, of West Greenville, Pa., for an "Improvement in bee hives."

"I claim the combination of the external and interna cases of the hive when both are constructed and arranged as herein shown and described, so as to be capable of being spread open as and for the purpose set forth."

No. 35,032. Geo. W. Morgan, of Mount Vernon, Ohio, and C. H. Tyler, and John McClave, of New York, N.Y., for an "Improvement in hammock tents."

"We claim, 1st, the combination of the upright side bars A, A, canvas cover D, portable trestles or supports F or G, transverse bars B, C, and the suspended adjustable sacking strips E, E, in the manner and for the purposes herein described. 2, the combination with the suspended sacking strips E, and the portable transverse bar C, of trestles F, constructed in manner specified, for the purpose set forth."

No. 35,033. Byron W. Nicholls, of Fairhaven, Conn., for an "Improvement in melodeons, &c."

"I claim, 1st, the combination of the spring clamps (*b*), with the projecting knob or catch (*a*), when constructed, arranged, and fitted to produce the result substantially as herein described. 2nd, I claim the clamp (*b*) in combination with the triangular portion of the spring (*k*), when so fitted and arranged that the moving of the register (*g*) will force and hold back the jaws, subantially as herein described."

No. 35,034. William T. Nichols, of Rutland, Vt., for an "Improved ironing machine."

"1st, I claim a smoothing-iron revolved horizontally by machinery and capable of adjustment at pleasure upon any part of the ironing table, and also upon the top of the fire box, substantially as described. 2nd, I claim heating rollers externally, while they are revolved for the purpose of ironing substantially as set forth. 3rd, I claim so applying a heated roller for the purpose of ironing, that it shall prevent the too rapid forward movement of the garment, at the same time that it performs the act of ironing, substantially as described. 4th, I claim so applying heated rollers for the purpose of ironing that they shall revolve at varying rates of speed, for the purpose set forth, substantially as described."

No. 35,035. Charles O. Hara, of London, England, for an "Improved propeller."

"I claim the arrangement and operation of the semi-cylindric oscillating propeller within the concave *a*, *a*, substantially as herein shown and described. Having the radial face of the said propeller provided with corrugations *b*, as shown and described. The combination with the said propeller of the circular plate *c*, as herein shown and described."

No. 35,036. George Palmer, of Littlestown, Penn., for an "Improvement in metallic grinding mills."

"I claim the movable ventilated longitudinal grinding plates attached to a revolving cylinder in sections, in the manner herein described, in combination with the concave grinding plates secured to the covering, and made yielding and adjustable by springs and set screws, or their equivalents, in the manner as and for the purposes herein set forth."

No. 35,037. John Phelps, of Laporte, Indiana, for an "Improved washing machine."

"I claim the reciprocating partially rotating rubber D, and the concave C, in combination with the spring H, adjustable weight I, and sliding frame F, all arranged for joint operation, as and for the purpose herein set forth."

No. 35,038. Edward A. Pierce, of Brighton, Mass., for an "Improvement in buckles."

"I claim as a new article of manufacture a buckle, constructed substantially as described, with its frame A, slotted roll B, and ratchet and pawl *d*, *e*, for the purpose described."

No. 35,039. Susan D. Pinkham, of Fond du Lace, Wis., for a "Ventilator for petrol oil lamps."

"I claim the combination of the curved tube inverted cup or disk with a lamp, substantially in the manner and for the purpose set forth."

No. 35,040. Adam R. Reese, of Phillipsburgh, N.J., for an "Improvement in cutting apparatus for harvesters."

"I claim the combination and connection of the finger beam A, guard fingers B, and face plate C, by means of the bolts *a*, when the whole are constructed, arranged, and operate as herein described, in combination with a reciprocating cutter, for the purpose set forth."

No. 35,041. Adam R. Reese, of Phillipsburg, N.J., for an "Improvement in finger beams for harvesters."

"I claim the combination in a finger beam of the two sections A and B, with the brace bar C, and overlapping plate E, when constructed and connected substantially in the manner and for the purpose described."

No. 35,042. Thomas Shaw, of Philadelphia, Pa., for an "Improvement in Tobacco Pipes."

"I claim the annular chamber D, between the inner bowl C, and the outer bowl B, the said chamber having vents *x*, *y*, arranged in respect of the vent *m*, as and for the purpose herein set forth,

No. 35,043. Jehial H. Simmonds, of New York, N. Y., for an "Improvement in heaters."

"I claim, 1st, securing the tubes F, in the hot air chamber D, by means of the flanches *c* on the upper ends of the tubes fitted in sand in recesses *d*, in the top plate *e*, of the hot air chamber, and by having the lower ends of the tubes fitted over vertical tubular projections *h*, on the bottom plate *i*, of the hot air chamber, and within sand and recesses *j*, which surround the tubular projections *h*, substantially as set forth. 2nd, the draught pipe K, having its lower part *u* of conical form, with an opening *o*, at its lower end, in connection with one or more draught tubes H, and a chamber J, or its equivalent, arranged in relation with the hot air chamber D, with or without deflector G, and smoke pipe L, to form a self cleaning device, as set forth."

No. 35,044. Ezekiel Smith, of Cold Spring Harbor, N.Y., for an "Improvement in harvesters."

"I claim attaching the cutters B, to the bar A, by means of the longitudinal adjustable cutter B^1, on the bar A, provided with an oblique inner side *g*, at its back part, and abutting against an oblique side *b+*, of its adjoining cutter B, in combination with the pins *c*, on the bar A, and the grooves *b*, in the cutters, and with or without the bar *c*, substantially as herein described."

No. 35,045. John M. Taber, of Greenwich, N.Y., for an "Improvement in hay elevators."

"I claim the combination of the gang forks (A, A^1,) united as described, with the block (G) and ropes or chains (E and F), in the manner and for the purpose specified."

No. 35,046. Wm. Tansley, of Salisbury Centre, N.Y., for an "Improvement in tools for paring horses' hoofs."

"I claim as a new and improved article of manufacture a butteris or hoof-paring implement formed of the two levers A, B, connected by a fulcrum pin *a*, and provided respectively with a jaw *b*, and knife C, substantially as shown and described."

No. 35,047. Wm. Thomson, of Detroit, Michigan, for an "Improved apparatus for evaporating saccharine juices."

"I claim, 1st, the arrangement of the pit A, with the conical arched spout *b*, damper *e*, and air holes *c*, in combination with the pan B, provided with heating tubes *d*, all arranged substantially in the manner and for the purpose herein shown and described. 2nd, the employment or use of the reciprocating scraper E, in combination with the heating tubes *d*, and pan B, as and for the purpose specified."

No. 35,048. Joseph C. Tilton, of Geneseo, Ill., for an "Improvement in ordnance for use under water."

"I claim the combination of the valve D, fitted to the opening C, and the sliding breech pin K, constructed and operated substantially as described through crank H, and its connections."

No. 35,049. James S. Topham, of Washington, D.C., for an "Improved slide for harness."

"I claim the employment of the spring plate B, and box A, constructed and used substantially as and for the purpose herein specified."

No. 35,050. J. R. Tunnicliffe, of New Hornsville, N.Y., for an "Improved fire alarm."

"I claim as an improved article of manufacture a fire alarm composed of a barrel A, and quick match *b*, combined and operating substantially as herein shown and described,"

No. 35,051. Alexander C. Twining, of New Haven, Conn., for an "Improvement in apparatus for cooling and freezing."

"First, I claim the condensing pump and condenser in combination with the restorer, whether with or without the gas pump and precipitating vessel between them and the escape pipe. I claim the gas pump and precipitating vessel, in combination with the restorer, whether with or without the condensing pump and condenser intervening; and I claim the employment of any cold surface of the vacuum vessel, or of the circulating pipes or the vapor pipe, as part of a precipitating vessel or of a condenser in any way substantially the same as above. Second, I claim the use of cloths as above, or other plates equivalent thereto, in combination with a distributing funnel or any distributing plate or arrangement for the liquid, also the use of the colanders in a series, all substantially as above, and in combination with a restorer. Third, I claim the above diaphragm arrangement for arresting mist or vesicles from vapor, in combination with an evaporating apparatus. Fourth, I claim the clarifier, in combination either with the circulating cold current, or the re-condensed liquor from the restorer. Fifth, I claim the combination of a vacuum vessel and a liquid cooled therein with a pump or pumps to draw out from the vacuum vessel and throw back in a continuous circulation that freezing or refrigerating liquid. Sixth, I claim the connection of the escape-pipe *u*, *u*, or of any escape or leak outward, with a cavity surrounding any part leaking inward to obviate loss of ether, as above."

No. 35,052. James A. Whalen, of Brooklyn, N.Y., for an "Improvement in revolving fire-arms."

"I claim the two pins *b*, *c*, and their springs *d* and *g*, applied in combination with each other, and with the cylinder and cylinder frame, substantially as and for the purpose herein specified."

No. 35,053. Dyer Williams, of Syracuse, N.Y., assignor to himself and Horace C. Silsby, of Seneca Falls, M., for an "Improvement in fire engines on locomotives."

"I claim the combination of a fire-engine with a locomotive engine for railroads, substantially as and for the purposes set forth."

No. 35,054. William E. Worthen, of New York, N.Y., for an "Improved faucet."

"I claim, 1st, the combination with the plug of a faucet of locking pistons, vibrating in lines perpendicular to the plug, the combination being substantially as specified, and the pistons being arranged on the faucet as set forth. Second, the omission or cutting away of the metal at the head of a faucet, which is provided with a plug so bored as described, that liquid shall pass through the bore of the faucet, and then through and out of the plug at right angles, or nearly so, to its former course, such omission or cutting away of the metal to be substantially to the extent and for the purpose described, and the faucet being so constructed that the liquid does not pass through the cavity formed by the omission or cutting away of the metal."

No. 35,055. Nathan Ames, of Saugus Centre, Mass, assignor to himself and Nathaniel Evans, jr., of Boston, Mass., for a "Self-feeding card printing press."

"I claim, first, a rotary, oscillating, reciprocating, type-bed and distributor, in combination with a rocking platen, substantially as described and for the objects specified. Second, the slide I, combined and arranged substantially as described, for the purpose of rocking the platen and keeping the type-bed parallel with it. Third, attaching the inking rollers to the continued axis N, of the crank shaft, causing them to rotate with it, and carrying the type-bed and distributer in a circle round said roller, substantially as and for the object specified. Fourth, so arranging the card-feeding apparatus on the top of the rocking platen, that the rocking of the same in combination with the bail S, shall feed down the cards at the proper time, substantially as set forth. Fifth, constructing the feeding plate R, with separate fingers *r*, and causing them to slide in grooves between the raised strips *q*, to prevent the face of the card from being soiled or scratched by coming in contact with that portion of the metal subjected to friction, substantially as described. Sixth, beveling the ends of the fingers *r*, so as always to pass under the edge of the card, and bring it up against the shoulder *c*, and prevent the latter from ever catching on to more than one card at a time, substantially as described. Seventh, making the shoulder *c* somewhat inclined, so as to form an acute angle with the surface of the raised strips *q*, substantially as described and for the objects specified."

No. 35,056. Pierre Boisset, of Paris, France, assignor to himself and Barnardo Antognini, of New York, N.Y., for an "Improvement in india-rubber heels of boots and shoes."

"I claim making the heel piece *a* of an india-rubber sole with a frame or frames *m*, provided with points *o*, incorporated therein, in the manner and for the purpose substantially as set forth."

No. 35,057. Pierre Boisset, of Paris, France, assignor to himself and Barnardo Antognini, of New York, N.Y., for an "Improvement in boots and shoes."

"I claim the combination with a plate or nut *a*, when the same is imbeded or incorporated within the india-rubber or caoutchouc sole while being made of a screw, so arranged and operating in connection with said plate as to allow of the sole being screwed up and fastened to the upper leather substantially in the manner and for the purpose specified."

No. 35,058. Charles S. Brown, of Homer, N.Y., assignor to himself and John H. Kennedy, of same place, for an "Improved portable sawing machine."

"I claim the combination and arrangement of the frame A, A, gate D, dog-arms L, fly wheel and crank G, F, and saw K, substantially in the manner and for the purpose shown and described. I also claim in combination with the described machine the clamp hooks *o*, or equivalent device, for holding the dog-arms L, L, rigidly to the frame A, A, to serve as levers for trundling the machine on the fly-wheel G, substantially as set forth."

No. 35,059. Joseph W. Douglas, of Middletown, Conn., assignor to W. and B. Douglas, of same place, for an "Improvement in pumps."

"I claim the combination of a vertical pump cylinder, the valve chest in position as described, and the lower end of the cylinder being made imperforate substantially in the manner and for the purpose set forth. I also claim the use of a tinned iron plate P, P, to aid in forming the floor of the horizontal passage O^2, O^2, extending from the front to the rear of the valve chest, substantially in the manner and for the purpose described."

No. 35,060. William Heston, of Bedford, Ohio, assignor to Alden H. Constock, of same place, for an "Improvement in horse-powers."

"I claim the self-adjustable standards H, and springs I, in combination with the rollers K, when these several parts are arranged in their relation to the crown wheel B, and pinion D, as and for the purpose specified."

No. 35,061. William H. Mathews, of Chelsea, Mass., assignor to Union Glass Company, of Somerville, Mass., for an "Improvement in glass deflectors for lamps."

"I claim the above described mode of constructing the glass deflector holder, viz., of the separate cap and base rings, provided with means of connecting them as set forth, in order that they may be applied to the glass deflector and its flanch, as specified."

No. 35,062. Stuart Perry, of Newport, N.Y., assignor to Charles H. A. Carter, of New York, N.Y., for an "Improvement in tread horse powers."

"I claim the use of two or more interlaced reciprocating treadles, to be operated upon by a horse or horses, for the purpose of making a horse power machine, substantially such

as described. I also claim in combination with two or more reciprocating interlaced treadles, the cams underneath them for bringing them alternately into contact with, and lowering them away from the feet of the horses, substantially as described. I also claim, in combination with two or more treadles acted upon alternately by the feet of the horse or horses, the racks, and segmental gears for producing a continuous rotary motion out of the alternate reciprocating motion of the said treadles substantially as described. I also claim returning each of the treadles after it has completed its working transverse, to its normal working position by means of the mechanism herein described and represented, or its substantial equivalent."

No. 35,063. Stuart Perry, of Newport, N.Y., assignor to Charles H. A. Carter, of New York, N.Y., for an "Improvement in circuit horse powers."

"I claim in circuit horse powers the hitching of the team or teams to an endless belt or band, that travels around with the team, for the purpose of transmitting the power of the team to a pulley, shaft, or wheel, whence it may be applied to any machinery, substantially as described. I also claim in combination with an endless belt or band that has a turn or 'bite' around a drum, shaft, pulley, or wheel, a self-acting connecting and disconnecting mechanism, whereby the draught may be continuous though the band or belt is let go, and seized by said mechanism, for the purpose set forth."

No. 35,064. Stuart Perry, of Newport, N.Y., assignor to Charles H. A. Carter, of New York, N.Y., for an "Improvement in speed regulators for horse powers, &c."

"I claim, first, in connection with a speed regulator for machinery, the arranging of the weights that are to be centrifugally acted upon, in the hollow arms of the wheel A, in connection with restraining or regulating springs, substantially as and for the purpose set forth. I also claim in combination with the weights acted upon centrifugally by the wheel A, the loose wheel E, belt g, and pulley F, or their equivalents, constructed, arranged, and operating, substantially as herein described. I also claim, in combination with a brake, which is operated by means of weights acted upon centrifugally, the poise J, applied on the retrograde side of the pulley F, substantially as and for the purpose described."

No. 35,065. John Schatt, of Philadelphia, Pa., assignor to himself and Samuel P. Mervine, of same place, for an "Improvement in dry gas meters."

"I claim the employment in dry gas meters, of levers C, C^1, provided each with a slot e, in its one end, for the reception of a traversing pin f, the same operating together substantially in the manner set forth, and for the purpose specified. I also claim making the knuckle D, to have only a single central arm d^3, as set forth, and connecting it with the valve rod levers, provided with suitable slots in their connecting ends, substantially in the manner described and set forth, for the purpose specified."

No. 35,066. James Sheridan, of St. Louis, Mo., for an "Improvement in snow ploughs."

"I claim the combination, arrangement, and mode of supporting the plough beam F, with the groove E^1, plough and ear body, as and for the purpose herein set forth."

Extensions.

No. 5536. Charles Goodyear, deceased late of New Haven, Conn., for an "Improvement in making hollow articles of india-rubber."—Patented 25th April, 1848.

"I claim the above described process of making hollow spheres, various hollow toys, or other hollow articles of caoutchouc, the same consisting in the employment of a mould and heat, and air, substantially in the manner and under the circumstances above set forth.

No. 3522. Lewis Moore, of Bart., Pa. for an "Improvement in seed planters."—Patented 18th April, 1848.

"I claim 1st, the particular combination and arrangement of the levers C, round P, bar C^{1x}, journals, p, with the hopper B, frame A, and notched supports g, for moving the hopper, and sowing cylinders, in the arc of a circle, for the purpose herein set forth. 2nd. I claim the combination of a segment slotted box plates F^1, containing the bearings of the cylinder axles, with the hopper arranged and operated in the manner and for the purpose above set forth. 3rd, I claim the manner of attaching the tubular drills L, to the forked rods or bars K, by the means of the wood and iron pins q, r, and flanges or wings s, as described and for the purpose set forth. 4th, I claim the combination of the chains O, with the tubes L, and bar C^1, of the hopper frame by which the tubes are raised or lowered simultaneously with turning the hopper on its axis as described."

No. 5529. Samuel Hall, deceased, late of Pittsburg, Pa., for an "Improvement in ploughs."—Patented, 25th April, 1848.

"I claim, 1st, the manner of securing the beam to the body of the plough by means of the curved termination of the rear end of the beam, the socket p, between the mould board and land side, the ear g, projecting from the mould board, with the slot J, in the same, and the screw bolt h, the whole combined and operating substantially in the manner and for the purpose herein set forth. 2d, I also claim, in combination with the foregoing described method of confining the beam to the body of the plough, the manner of giving a lateral adjustment to the front end of the beam by means of the wedge e, substantially as herein set forth. 3rd, I also claim, in combination with the method of securing the beam to the body of the plough, the manner of combining the handles with the beam, by means of the projecting arm s, the aperture W, and slot n, in the same, and the screw bolt i, i, combined and operating with the front end of the beam, substantially as herein set forth. 4th, I also claim the manner of forming and uniting the wrought share with the point and cutter, by the combination of riveting and welding, substantially in the manner and for the purpose herein set forth."

No. 5531. Asa Whitney, of Philadelphia, Pa., for an "Improvement in annealing and cooling cast iron car wheels."—Patented 25th April, 1848.

"I claim the process of prolonging the time of cooling, in connection with annealing railroad wheels, in the manner above described; that is to say, the taking them from the moulds in which they are cast, before they have become so much cooled as to produce such inherent strain on any part as to impair its ultimate strength, and immediately after being thus taken from the moulds, depositing them in a previously heated furnace or chamber, so constructed of such materials, and subject to such control that the temperature of all parts of the wheels deposited therein may be raised to the same point (say a little below that at which fusion commences), when they are allowed to cool so fast, and no faster than is necessary for every part of each wheel to cool and shrink simultaneously together, and no one part before another."

Re-issue.

No. 1304. Dennis G. Littlefield, of Albany, N.Y., for an "Improvement in hot-air furnaces."—Patented, 9th October, 1860; ante-dated 3rd July, 1860.

"I claim, 1st, the combination of the cold air channel H, the perforations S, S, S, S, the register S^1, and the damper R, as described. 2nd, combining in hot air furnaces the shell or covering L, the register S^1, for opening and closing the top of the shell, as set forth, the perforations S, S, S, S, opposite or near the fire pot, and the cold air channel H, substantially as above described."

Design.

No. 1567. W. H. Core, of New York, N.Y., assignor to himself and A. Lorenz, of same place, for a "Design for a show case."

List of Specifications published during the week ending 3rd May, 1862.

No.	Price.	Name of Patentee and Subject-Matter.
2136	1*s.*	Fondu, J. B.—Fire-grates.
2204	3*d.*	Bayley, J. K., Harrison, T., Briggs, W., and Parker, R.—Preparing and spinning cotton, &c.
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2320	3*d.*	Statham, J., and Statham, W.—Machinery for mowing and reaping.
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The following are in the press:—

PREPARATION OF FUEL, AND APPARATUS FOR ITS COMBUSTION.
STEAM ENGINES.

B. WOODCROFT.

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By Authority.

(Registered for transmission abroad.)

No. 871. FRIDAY, MAY 9, 1862. Price 2d.

Applications for Letters Patent.

(6th, 7th, and 8th May, 1862.)

1343. Thomas Cabourg, of 333, Rue St. Martin, Paris, empire of France, Boot and Shoe Manufacturer, for an invention of "Improvements in machines for the purpose of uniting together by means of screws leather used in the manufacture of boots and shoes, and other articles composed of two or more pieces of leather."—Dated 6th May, 1862.

1344. Richard Mills, of Bury, in the county of Lancaster, Machine Maker, for an invention of "Improvements in washing, wringing, drying, and mangling machines."—Dated 6th May, 1862.

1345. Augustin Morel, of the town of Roubaix, in the department of the Nord, in the empire of France, Manufacturer, for an invention of "Improvements in heckling machines."—Dated 6th May, 1862.

1346. George Borthwick, of Bedford, near Leigh, in the county of Lancaster, Book-keeper, for an invention of "Certain improvements in the construction of ships and boats, and certain other floating bodies."—Dated 6th May, 1862.

1347. Paul Chenaillier, of Paris, France, Gentleman, for an invention of "Improvements in apparatus for concentrating liquids, or for condensing alcoholic or other vapours."—Dated 6th May, 1862.

1348. John Clarke, of Chilvers Coton, in the county of Warwick, School Master, and John Richmond, of Chilvers Coton aforesaid, Ribbon Draughtsman, for an invention of "Improvements in looms for weaving."—Dated 6th May, 1862.

1349. Walter Richard and John Richard, both of Edinburgh, Type Founders, for an invention of "Improvements in the manufacture of printing types, spaces, and quadrats."—Dated 6th May, 1862.

1350. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the manufacture and production of minium or red lead."—A communication to him from abroad by Charles Louis Pierre Burton of 45, Rue St. Sébastien Paris, in the, empire of France.—Dated 6th May, 1862.

1351. William Greaves, of 11, Portland Street, Poland Street, Soho, in the county of Middlesex, Saddle Tree Maker, for an invention of "Improvements in safety stirrup bars."—Dated 6th May, 1862.

1352. John Henry Johnson, of 47, Lincoln's Inn Fields, in the county of Middlesex, and of 166, Buchanan Street, in the city of Glasgow, North Britain, Gentleman, for an invention of "Improvements in the manufacture of soda and potash, and of their carbonates."—A communication to him from abroad by Charles Louis Pierre Burton, of 45, Rue St. Sébastien, Paris, in the empire of France.—Dated 6th May, 1862.

1353. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "An improved buckle or fastening."—A communication to him from abroad by Jean Louis André, of 29, Boulevart St. Martin, Paris, Manufacturer.—Dated 6th May, 1862.

1354. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in cylinder printing apparatus."—A communication to him from abroad by Messrs. Felix Marie Baudouin, Civil Engineer, and Henry Jérémie Christen, Engraver, both of 29, Boulevart St. Martin, Paris.—Dated 6th May, 1862.

1355. James Edward Ransome, William Copping, and Lawson Lansdell, all of Ipswich, in the county of Suffolk, for an invention of "Improvements in harrows."—Dated 6th May, 1862.

1356. William Edward Nethersole, of the town of Swansea, in the county of Glamorgan, District Carriage Superintendent of the Great Western Railway Company, for an invention of "Improvements in parts of railway trucks and waggons, parts of which are applicable to railway carriages."—Dated 7th May, 1862.

1357. William Judson, Counsellor at Law, of the city of New York, in the United States of America, for an invention of "The use of caoutchouc or india-rubber for, and its application to, guns, mortars, or other fire-arms to resist the force of the recoil and reaction in firing."—Dated 7th May, 1862.

1358. Eugine Bourdon, of Paris, in the empire of France, Mechanical Engineer, for an invention of "Improvements in the construction of blowing fans, which improvements are also applicable to centrifugal pumps for raising water and other liquids or gases, or for exhausting the same."—Dated 7th May, 1862.

1359. Charles Victor Fournier De Berville, of No. 72, Rue Blanche, Paris, France, for an invention of "An improved safety coupling bar for locomotives and other railway carriages."—Dated 7th May, 1862.

1360. Philip Howard Colomb, of Her Majesty's Dockyard, Devonport, in the county of Devon, Lieutenant in the Royal Navy, for an invention of "Improvements in arrangements and apparatus for signalling."—Dated 7th May, 1862.

1361. Thomas Markland, of Hyde, in the county of Cheshire, Expansive Reed Maker, for an invention of "Certain improvements in wearing apparel."—Dated 7th May, 1862.

1362. Thomas Harry Hopwood, of Hulme, in the city of Manchester, in the county of Lancaster, Engineer, for an invention of "Certain improvements in the means or apparatus to be employed for the purpose of raising sunken vessels or other submerged bodies, and also in the application of a self-acting balance and regulator to the pontoons used therein."—Dated 7th May, 1862.

1363. Charles Clark, of 361, City Road (E.C.), in the county of Middlesex, for an invention of "An improved cigar tube."—Dated 7th May, 1862.

1364. Nicholas Wood, of Hetton Hall, in the county of Durham, Coal Owner, and Joseph Stockley, of Newcastle-on-Tyne, in the county of Northumberland, Engineer, for an invention of "Improvements in grinding, smoothing, and polishing plate glass."—Dated 7th May, 1862.

1365. Jeremiah Johnson, Cordwainer, and Arthur Chapman, Gentleman, both of Leatherhead, in the county of Surrey, for an invention of "Improvements in apparatus for preventing collisions on railways."—Dated 7th May, 1862.

1366. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "An improved box and apparatus for containing and igniting matches."—A communication to him from abroad by Louis Leonard Poulain, of Presles, France.—Dated 7th May, 1862.

1367. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in swings."—A communication to him from abroad by Joseph Ellicott Holmes, of New York, United States of America.—Dated 7th May, 1862.

1368. John Combe, of Leeds, in the county of York, Engineer, for an invention of "An improved machine for spreading and drawing into slivers flax, hemp, jute, and other fibrous substances."—Dated 7th May, 1862.

1369. George Tomlinson Bousfield, of Loughborough Park, Brixton, in the county of Surrey, for an invention of "Improvements in applying steam power to tilling land by means of a digging locomotive."—A communication to him from abroad by Elias Howe, junior, a person resident at Brooklyn, state of New York, United States of America.—Dated 7th May, 1862.

1370. Joseph Haley, of Rochester Villa, Battersea, in the county of Surrey, Gentleman, for an invention of "Certain improvements applicable to ships' boats and batteries."—Dated 7th May, 1862.

1371. William Gossage, of Widnes, in the county of Lancaster, Chemist, for an invention of "Certain improved apparatus to be used in the manufacture of soap."—Dated 7th May, 1862.

1372. Désiré Marchal and Adrien Carton De Wiart, both of Brussels, in the kingdom of Belgium, for an invention of "An improved method of preventing the destructive effects of vibration or jar on the permanent way of railways, and on the wheels, axletrees, and other parts of carriages, and the working and other parts of machinery liable to shocks."—Dated 7th May, 1862.

1373. John McCann, of the city of Dublin, Gentleman, for an invention of "Improvements in the mode of, and apparatus for, drying, cooling, and cleaning grain."—Dated 7th May, 1862.

1374. John Hay, of Troon, in the county of Ayr, North Britain, Shipbuilder, for an invention of "Improved arrangments to facilitate the cleaning and repairing of ships' bottoms."—Dated 8th May, 1862.

1375. William Peel Gaulton, Engineer, and Major Booth, Calenderer and Finisher, both of the city of Manchester, in the county of Lancaster, for an invention of "Improvements in apparatus or machinery for damping and steaming fabrics, part of which improvements are applicable for distributing fluids for other purposes."—Dated 8th May, 1862.

1376. William Riddle, of Gerrard Street, in the parish of Islington, in the county of Middlesex, for an invention of "Improvements in hydraulic and other presses in packing machinery, and in treating cotton and other fibrous substances."—Dated 8th May, 1862.

1377. Andrew Bearne, of 24, Union Street, Torquay, in the county of Devon, Boot Maker,

for an invention of "Rendering the heels of boots, shoes, and goloshes elastic to pressure."—Dated 8th May, 1862.

1378. William Southwood, of Kensington, in the county of Middlesex, Civil Engineer, for an invention of "Improvements in machinery for pulverising ores and extracting metals therefrom, part of which is applicable to breaking stones."—Dated 8th May, 1862.

1379. John Fowler, of Leeds, in the county of York, Engineer, and John King, of Chadshunt, Warwickshire, Farmer, for an invention of "Improvements in apparatus for tilling land by steam power."—Dated 8th May, 1862.

1380. Peter Tate, of Park Terrace, South Street, Kennington, in the county of Surrey, Gentleman, for an invention of "Improvements in smelting furnaces."—A communication to him from abroad by Wladcmer Raschette, of the Mining Department, St. Petersburg, Russia, Major General.—Dated 8th May, 1862.

1381. Charles Lungley, of Deptford, in the county of Kent, Ship Builder, for an invention of "Improvements in apparatus for manœuvring ships and vessels."—Dated 8th May, 1862.

1382. George Charles Grimes, of No. 8, Wandle Terrace, South Street, Wandsworth, in the county of Surrey, for an invention of "Improvements in the manufacture of cigar lights, splints, matches, and tapers or vestas, and in machinery or apparatus employed therein."—Dated 8th May, 1862.

1383. Astley Paston Price, of 47, Lincoln's Inn Fields, in the county of Middlesex, Gentleman, for an invention of "Improvements in straps or bands for securing articles, parcels, or luggage."—Dated 8th May, 1862.

1384. Arthur Kinder, of 30, Cannon Street, in the city of London, Engineer, for an invention of "Improvements in the manufacture of sheet metal."—Dated 8th May, 1862.

1385. Leo De la Peyrouse, of 13, Panton Square, in the county of Middlesex, Manufacturer, for an invention of "Improvements in treating neutral and acid fatty or oily substances, resins and resinous substances, and compounds or products containing paraffine."—Dated 8th May, 1862.

1386. Nathaniel Thompson, of Birmingham, in the county of Warwick, Merchant, for an invention of "Improvements in barometers."—A communication to him from abroad by Jedediah Hubbell Dorwin, of Montreal, in the province of Canada.—Dated 8th May, 1862.

Grants of Provisional Protection for Six Months.

Notice is hereby given that Provisional Protection has been allowed

3266. To Frederick Tolhausen, Civil Engineer and Patent Agent, of No. 35, Boulevart Bonne-Nouvelle, Paris, in the empire of France, for the invention of "A new method of, and machinery for, covering springs used for petticoats and other articles." — A communication from Antoine Rameau, a person resident at No. 35, Boulevart Bonne-Nouvelle, Paris, in the empire of France.
On his petition, recorded in the Office of the Commissioners on the 31st day of December, 1861.

281. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "Improved processes for the recovery of the oleic acid contained in the residual scouring waters of woollen and other textile materials or fabrics." — A communication from Edmond Lepainteur, a person resident at Gallard, by Longeron (Maine et Loire), France.
On his petition, recorded in the Office of the Commissioners on the 1st day of February, 1862.

746. To Marc Antoine François Mennons, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the empire of France, for the invention of "An improved combination of cooling and filtering apparatus, forming a safe for the preservation of solid and liquid provisions."—A communication from Joseph Weatherby Bartlett, a person resident at No. 419, Broadway, New York, in the United States of America.
On his petition, recorded in the Office of the Commissioners on the 18th day of March, 1862.

763. To Robert Hadfield and Jabez Shipman, both of Attercliffe, in the borough of Sheffield, and county of York, Wire Drawers and Manufacturers, for the invention of "Improvements in hardening and tempering wire and crinoline steel."
On their petition, recorded in the Office of the Commissioners on the 19th day of March, 1862.

979. To Benjamin Thompson, of Walker, near Newcastle-upon-Tyne, for the invention of "Improvements in steam engines."
On his petition, recorded in the Office of the Commissioners on the 5th day of April, 1862.

988. To Joseph Watremez, Merchant, at Aix-la-Chapelle, and Aloys Kloth, Merchant, at Aix-la-Chapelle, for the invention of "Improved apparatus for indicating a deficiency of water in steam generators."
On their petition, recorded in the Office of the Commissioners on the 7th day of April, 1862.

999. To John Jaques, junior, of the firm of John Jaques and Son, of 102, Hatton Garden, in the county of Middlesex, for the invention of "Improvements in the instruments used in the game of croquêt."—Partly the result of a communication made to him from abroad by William Fowler Mountford Copeland, residing at Madeira, and partly of invention and discovery made by himself.
On his petition, recorded in the Office of the Commissioners on the 8th day of April, 1862.

1052. To James Howard, Agricultural Engineer, and Edward Tenney Bousfield, Engineer, both of Bedford, and Thomas Phillips, Foreman at the Britannia Iron Works, Bedford, for the invention of "Improved apparatus applicable to steam cultivation."
On their petition, recorded in the Office of the Commissioners on the 11th day of April, 1862.

1077. To Charles James Coxhead, of No. 10, Emeis Terrace, Kentish Town, in the county of Middlesex, late of Castle Street, Shrewsbury, in the county of Salop, for the invention of "Improvements in pianoforte actions."

1078. And to George Fell, Leather Manufacturer, and William Haynes, Manager, both of Bolton, in the county of Lancaster, for the invention of "Improvements in machinery or apparatus to be used in the manufacture of leather."

On both their petitions, recorded in the Office of the Commissioners on the 15th day of April, 1862.

1149. To Alexander Parkes, of Liverpool Street, Birmingham, in the county of Warwick, for the invention of "Improvements in surface condensers."

On his petition, recorded in the Office of the Commissioners on the 19th day of April, 1862.

1162. To Charles Callebaut, of 2, Rue Sainte Appoline, Paris, France, and of 4, South Street Finsbury, London, for the invention of "Some improvements in sewing machines."

On his petition, recorded in the Office of the Commissioners on the 21st day of April, 1862.

1168. To Silas Safford Putnam, of Dorchester, county of Norfolk and state of Massachusetts, United States of America, for the invention of "Certain improvements in machines for forging horse shoe nails and other articles."

On his petition, recorded in the Office of the Commissioners on the 22nd day of April, 1862.

1206. To Silas Covell Salisbury, of Coventry, in the county of Warwick, Engineer, for the invention of "Improvements in the construction of sewing machines."

1210. To Richard Christopher Mansell, of Ashford, in the county of Kent, Engineer, for the invention of "Improvements in the construction of wheels to be used on railways."

1214. To John Elder, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "Improvements in steam engines and boilers."

1216. To James Aspinall, of Middlesborough-on-Tees, in the county of York, for the invention of "An improved apparatus for the safe conveyance, from sea to land of ships' papers, documents, money, and other valuables when wrecks or other casualties occur at sea."

1218. To Alexander Carnegie Kirk, of Bathgate North Britain, Engineer, for the invention of "Improvements in refrigerating apparatus."

1220. To William Hale, of No. 6, John Street, Adelphi, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in rockets."

1222. To Lachlan McLachlan, of Manchester, in the county of Lancaster, Photographic Artist, for the invention of "Improvements in governing or regulating light used for taking photographic portraits and other photographic pictures, part of which improvements is also applicable to lighting picture galleries."

1224. And to William Edward Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in chimneys for lamps."—A communication to him from abroad by Harvey Brown, of New York city, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 25th day of April, 1862.

1228. To John Gay Newton Alleyne, of the Butterley Iron Works, Alfreton, in the county of Derby, for the invention of "Improvements in machinery and apparatus for the preparation and manufacture of iron and steel."

1232. To Francis Gybbon Spilsbury and Frederick William Emerson, both of Stratford, in the county of Essex, Chemists, for the invention of "Improvements in the treatment of fusel oil, and for various applications of the same to useful purposes."

1234. To Herbert William Hart, of Higher Broughton, Manchester, in the county of Lancaster, Engineer, for the invention of "Improvements in the manufacture of reflectors and shades for gas and other lights."

1236. And to George Hedgecombe Smith, of North Perrott, in the county of Somerset, Twine and Web Manufacturer, for the invention of "Improvements in the manufacture of crinoline or elastic hoops for dresses."

On their several petitions, recorded in the Office of the Commissioners on the 26th day of April, 1862.

1242. To John Fletcher, of Farnham Place, Southwark, in the county of Surrey, Engineer, for the invention of "Improvements in the apparatuses for treating saccharine liquids."

On his petition, recorded in the Office of the Commissioners on the 28th day of April, 1862.

1250. To Samuel Wilmott Newington, of Goudhurst, in the county of Kent, Surgeon, for the invention of "Improved apparatus for letting off and stopping the flow of liquids from casks and vessels, such apparatus forming a tap, and substitute for the ordinary vent peg."

1254. To Richard Bright, of Bruton Street, in the city of Westminster, Lamp Manufacturer, for the invention of "Improvements in lamps and in apparatus for lighting Argand and other wicked lamps."

1256. To William Littell Tizard, of Mark Lane, in the city of London, Engineer, for the invention of "Improvements in heating, cooling, and condensing apparatuses."

1260. To Edward Brown Wilson, of Number 5, Parliament Street, Westminster, in the county of Middlesex, Engineer, for the invention of "An improvement in the machinery or apparatus used in the manufacture of malleable iron and steel."

1262. And to William Edward Newton, of the office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for the invention of "Improvements in the construction of mowing and reaping machines."—A communication to him from abroad by Louis Adolphe Faure, of Rue St. Sébastien, Paris, in the empire of France.

On their several petitions, recorded in the Office of the Commissioners on the 29th day of April, 1862.

1266. To Arthur Irwin Mahon, of 25, Leinster Square, Rathmines, in the county of Dublin, Engineer, for the invention of "Improvements in projectiles."

1272. To Evan Leigh, of the city of Manchester, in the county of Lancaster, Mechanical Engineer, for the invention of "Improvements in the construction of ships and floating batteries, in mounting their guns, and in the application of steam power, parts of which improvements are also applicable to land batteries and forts."

1276. To George Henry Birkbeck, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the county of Middlesex, Patent Agents and Engineers, for the invention of "Improvements in the construction of couches or settees for the purpose of sitting, lying, or reclining upon."—A communication to him from abroad by Mr. Charles Henry Ferdinand Leroux, Merchant, of Paris, in the empire of France.

1280. To James Lee Norton, of Belle Sauvage Yard, Ludgate Hill, in the city of London, for the invention of "Improvements in apparatus for drying fibrous materials and yarns."

1284. To Henry Willis, of Albany Street, Regent's Park, in the county of Middlesex, Organ Builder, for the invention of "Improvements in valves for the supply and discharge of gaseous bodies."

1286. And to William Thomas Loy, of Rood Lane, in the city of London, for the invention of "Improved machinery or apparatus for carding cotton and other fibrous substances of a similar character."—A communication to him from abroad by Alphonse Ryex the younger, of Rue de la Porte de Bruges, Ghent, Belgium.

On their several petitions, recorded in the Office of the Commissioners on the 30th day of April, 1862.

1288. To William Bickford Smith, of Camborne, in the county of Cornwall, Merchant, and William Bennetts, of Tucking Mill, in the county of Cornwall, Engineer, for the invention of "Improvements in the method of, and apparatus for, preventing the injurious effects occasioned by smoke, sulphur, and the deleterious gases which escape from stacks, chimneys, calcining houses, chemical and other furnaces."

On their petition, recorded in the Office of the Commissioners on the 1st day of May, 1862.

Inventions protected for Six Months by the Deposit of Complete Specifications.

Notice is hereby given, that the petition of

1308, Joseph Tyler, of 5, Kennington Place, Kennington Lane, in the county of Surrey, Professor of Music, praying for Letters Patent for the invention of "Improvements in the manufacture of clarionets," was deposited and recorded in the Office of the Commissioners on the 3rd day of May, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Notice is hereby also given, that the petition of

1333. François Marrel, of Marseille, France, Iron Master, praying for Letters Patent for the invention of "Improvements in forming wrought iron bars for the manufacture of armour plates and other articles of forged iron," was deposited and recorded in the Office of the Commissioners on the 5th day of May, 1862, and a complete specification accompanying such petition was at the same time filed in the said office.

Notice of Application for Leave to enter a Disclaimer and Memorandum of Alteration.

In the Matter of a Patent granted to Thomas Silver, of Philadelphia, in the state of Pennsylvania, U.S., for the invention of "An improved steam engine governor," bearing date the 23rd day of May, 1857. (No. 1459.)

Notice is hereby given, that the Patentee of the said Letters Patent has applied by petition to Her Majesty's Commissioners of Patents for leave to enter a Disclaimer and Memorandam of Alteration of parts of the Specification of the said Letters Patent, and that any person intending to oppose such application, must give notice thereof at the Office of the Attorney-General, No. 1, Paper Buildings, Temple, within ten days from the date hereof. —Dated this 6th day of May, 1862.

William Smith, C.E.,
Agent for the Patentee,
No. 19, Salisbury Street, Adelphi,
W.C.

Patents Sealed.

List of Letters Patent which passed the Great Seal on the

9th May, 1862.

2834. William John Hay, of Southsea, in the county of Hants, Experimental Chemist, for an invention of "Improvements in protecting iron and wooden ships, caissons, dams, and other wooden or iron structures from decay and from fouling by vegetable and animal matters, and in preparing the materials employed therein."—Dated 12th November, 1861.

2835. Robert Bellis, of the city of Chester, Builder, for an invention of "An improved method of laying wood floors."—Dated 12th November, 1861.

2836. John Davidson, of Leek, in the county of Stafford, Silk Manufacturer, for an invention of "Improvements in apparatus for communicating between the passengers and the guard and engine-driver of a railway train."—Dated 12th November, 1861.

2857. Charles Edmund Wilson, of Monkwell Street, in the city of London, Manufacturer, for an invention of "A new article of female wearing apparel to be worn on the leg."—Dated 13th November, 1861.

2859. Frederick Coney, of Waterloo Road, in the county of Surrey, Brush Maker, for an invention of "An improved stock for brooms."—Dated 13th November, 1861.

2860. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, Patent Agent, for an invention of "Improvements in albums for containing photographic and other pictures."—A communication to him from abroad by Auguste Marion, of Paris, France.—Dated 13th November, 1861.

2861. Henry Bird, of Liverpool, in the county of Lancaster, Chemist and Druggist, for an invention of "Improvements in the construction of bottles and other vessels, and in stoppers for the same to indicate that they contain poison."—Dated 13th November, 1861.

2865. Henry Robinson Fricker, of No. 106, Leman Street, Whitechapel, Architect and Surveyor, and John Manley, of Fairmantle Street, Truro, in the county of Cornwall, Civil Engineer and Mining Agent, for an invention of "Improvements in apparatus for facilitating the cleansing of sewers and other water courses or ways."—Dated 13th November, 1861.

2882. Joseph Booth, Thomas William Chambers, and James Chambers, all of Bury, in the county of Lancaster, for an invention of "Improvements in looms for weaving."—Dated 16th November, 1861.

2894. Frederick Caesar Paetow, of the city of Manchester, in the county of Lancaster, Commission Merchant, for an invention of "Improvements in machinery or apparatus for raising and finishing fabrics."—A communication to him from abroad by Mr. Tillman Esser, of Burtscheid, in the kingdom of Prussia.—Dated 18th November, 1861.

2969. Robert Harcourt, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "An improvement or improvements in fastening knobs to doors, drawers, and other articles, and in connecting knobs to spindles."—Dated 26th November, 1861.

3271. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention of "Improved apparatus for boring rocks and other mineral substances."—A communication to him from abroad by Emanuel Lisbet, of No. 45, Rue St. Sébastien, Paris, in the empire of France.—Dated 31st December, 1861.

66. Joel Haywood Tatum and William James Williams, of New York, United States of America, but now residing at Arundel Street, Strand, in the county of Middlesex, for an invention of "Improvements in the manufacture and structure of wicks, and in the application of the same to the manufacture of candles."—Dated 9th January, 1862.

380. William Hewitt, of Birmingham, in the county of Warwick, Manufacturer, for an invention of "Improvements in rein holders."—Dated 13th February, 1862.

537. James Tangye, of the firm of Tangye, Brothers, and Price, of Birmingham, in the county of Warwick, Manufacturers, for an invention of "An improvement or improvements in hydraulic lifting jacks."—Dated 27th February, 1862.

571. Henry Bowen, of Cardiff, in the county of Glamorgan, Gas Engineer, for an invention of "Improvements in gas meters."—Dated 1st March, 1862.

752. William Tongue, of Bradford, in the county of York, Engineer, for an invention of "Improvements in machinery and in processes for preparing, heckling, dressing, and combing flax, hemp, silk, and other fibrous materials."—Dated 18th March, 1862.

Patents which have become Void.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 50*l.*, before the Expiration of the Third Year from the date of such Patents, pursuant to the Act of the 16 Vict., c. 5, sec. 2, for the week ending the 3rd day of May, 1862.

1053. George Pearson, of Bugbrook, near Weedon, in the county of Northampton, Contractor, for an invention of "Improvements in apparatus for cutting and shaping trenails."—Dated 27th April, 1859.

1055. Henry Richardson Fanshawe, late of Messrs. Silver and Company's Works, North Woolwich, now of 13, Russell Place, Old Kent Road, in the county of Surrey, India Rubber Manufacturer, for an invention of "Improved apparatus or mechanism for drawing off, filtering and guaging liquids in butts, barrels, casks, and such like vessels, preserving the contents from deterioration from contact with atmospheric air."—Dated 27th April, 1859.

1056. John Stuart, of Musselburgh, in the county of Midlothian, North Britain, and William Stuart, of same place, Manufacturers, for an invention of "Improvements in machinery or apparatus for manufacturing nets for fishing and for other purposes."—Dated 27th April, 1859.

1058. Robert James Laing, of the Independent Gas Works, Haggerstone, in the county of Middlesex, Engineer, for an invention of "Improvements in wet gas meters."—Dated 27th April, 1859.

1061. Thomas Lacey, of Grafton Street, in the city of Westminster, Gas Engineer, for an invention of "Improvements in gas regulators."—Dated 27th April, 1859.

1068. Nicolas Libotte, Mechanician, of 33, Boulevart St. Martin, Paris (empire of France), for an invention of "A steam brake for mines which may also be worked by hand."—Dated 28th April, 1859.

1069. Nathaniel John Holmes, Gentleman, of Glasgow, county Lanark, Scotland, for an invention of "Improvements in electric telegraphs, and apparatus connected therewith."—Dated 28th April, 1859.

1070. Eugène Lardenois, of Brussels, in the kingdom of Belgium, Merchant, for an invention of "Improvements in the manufacture of pulp for paper, pasteboard, and other like articles."—A communication to him by Bounet Frederic Brunel, residing in Brussels.—Dated 28th April, 1859.

1071. Thomas Clarke, of Hackney, in the county of Middlesex, Engineer, for an invention of "Improvements in sheaves or pulleys for paying out and hauling in ropes, chains, and cables for communicating motion to machinery, and for other useful purposes." — Dated 28th April, 1859.

1072. John Wheat, of Hinckley, in the county of Leicester, for an invention of "Certain improvements in drilling machines employed for agricultural purposes."—Dated 28th April, 1859.

1073. William Alonzo Tompson, of 18, Cecil Street, Strand, in the county of Middlesex, and Weston Green, Thames Ditton, in the county of Surrey, Surgeon and Apothecary, for an invention of "Improvements in apparatus for applying liquids to the throat and air passages for medical purposes."—Dated 28th April, 1859.

1076. William Corbett, of Clayton, near Manchester, in the county of Lancaster, and William Carmont, of the same place, Iron and Steel Manufacturers, for an invention of "Certain improvements in the construction and arrangement of furnaces employed in the manufacture of iron and steel, and for other similar purposes."—Dated 29th April, 1859.

1077. John Wellington Welch, of Manchester, in the county of Lancaster, Warp Sizer, for an invention of "Improvements in sizing or dressing yarns or threads for weaving."—Dated 29th April, 1859.

1079. Edgar Andrew Porteus, of 18, Warwick Square, Paternoster Row, Engraver and Printer, and William Henry Burke, of 79, Cannon Street West, Manufacturer, for an invention of "Improvements in printing and other presses."—Dated 29th April, 1859.

1081. Thomas Smith, of Bredfield, in the county of Suffolk, for an invention of "Improvements in cultivating implements."—Dated 29th April, 1859.

1084. John Darlington, of No. 36, Cannon Street, in the city of London, county of Middlesex, Mining Engineer, for an invention of "Improvements in zinc retort furnaces."—Dated 30th April, 1859.

1087. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in ventilating or supplying air to diving bells and divers, and in holding communication therewith from above,"—A communication to him from abroad by Francois Aquilas Laurent of Paris.—Dated 30th April, 1859.

1091. Joseph Souquière, (called Emile), of 29, Boulevart St. Martin, Paris, in the empire of France, Civil Engineer, for an invention of "A new or improved process for distilling coal."—Dated 30th April, 1859.

1096. Richard Archibald Brooman, of 166, Fleet Street, in the city of London, E.C., Patent Agent, for an invention of "Improvements in and in connection with electro-magnetic engines."—A communication to him from abroad by Alexandre Paul Marie Darlu, of Paris.—Dated 2nd May, 1859.

1097. John Basford, of the Brick Yard, Oundle, in the county of Northampton, for an invention of "An improvement in the apparatus used when expressing clay or brick earth through dies."—Dated 2nd May, 1859.

1101. William Gossage, of Widnes, in the county of Lancaster, Chemist, for an invention of "Improvements in the manufacture of caustic soda and carbonate of soda from certain alkaline liquors and salts."—Dated 2nd May, 1859.

1103. Frederick William Emerson, of 110, Fenchurch Street, in the city of London, for an invention of "Improvements in treating ores to obtain a new metallic substance and its salts, and in the application of such matters, and also certain products of tungsten in dyeing, printing, and painting."—Dated 2nd May, 1859.

1107. William Clark, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention of "Improvements in obtaining or extracting quinine and the principal organic alkalies."—A communication to him from abroad by Lalouel de Sourdeval, 22, Rue Bergere, Paris.—Dated 3rd May, 1859.

1110. Jedediah Morse, of the state of Massachusetts, of the United States of America, for an invention of "An improved power printing press.' —Dated 3rd May, 1859.

1114. Edward Watkin Scale, of Merthyr Tydfil, in the county of Glamorgan, Gentleman, for an invention of "Improvements in railway signals." —Dated 3rd May, 1859.

A List of the Letters Patent for Inventions which have become Void by reason of the Non-payment of the additional Stamp Duty of 100*l*., before the Expiration of the Seventh Year from the date of such Patents, pursuant to the Act of the 16 Vict., c. 5, sec. 2, for the week ending the 3rd day of May, 1862.

962. William Elliot Carrett, of the Sun Foundry, Leeds, in the county of York, Engineer, for an invention of "Improvements in motive power engines."—Dated 28th April, 1855.

963. James Marsh, of 13, Store Street, Bedford Square, in the county of Middlesex, Pianoforte Manufacturer, for an invention of "Improvements in the construction of pianofortes for rendering them more portable."—Dated 28th April, 1855.

969. Henry Francis, of 456, West Strand, for an invention of "Improvements in manufacturing boots and shoes."—Dated 30th April, 1855.

970. Pierre Dépierre, Merchant, of 101, Rue de Seine, in the city of Paris and empire of France, for an invention of "Improvements in dyeing, part of which improvements is applicable to the manufacture of ink."—Dated 30th April, 1855.

984. Frederick William Harrold, of Birmingham, in the county of Warwick, Merchant, for an invention of "An improvement or improvements in the manufacture of the frames of slates used for writing on."—Dated 2nd May, 1855.

FOREIGN PATENTS.



FRANCE.

CURRENT LIST of PATENTS of Invention and Certificates of Addition.

1861.

(*Communicated by His Excellency the Minister of Agriculture, Commerce, and Public Works.*)

NOTE.—The duration of a Patent is fifteen years, except where determined by that of a previously existing foreign Patent.*

51,669. ARIBAUD and PATHIOT, of Constantine, for "A fly-wheel with moveable balls."—Dated 31st October, 1861.

51,670. BANE and PASTEUR, of Raches, for "A process for promoting the fusion of substances employed in the manufacture of window glass."—Dated 18th November, 1861.

51,671. BARATEAU, of Penjard, for "A water mill."—Dated 14th November, 1861.

51,672. BAUDRY, of Rochemont, near Saintes, for "A system applicable to all kinds of pumps, whereby piston-rods are suppressed."—Dated 16th November, 1861.

51,673. BOIZON, of Fontaulade, for "A thrashing machine with an apparatus for shaking the straw."—Dated 2nd October, 1861.

51,674. BRÉARD, of Rue Robert, Elbeuf, for "A system of windows for removing the inconveniences resulting from wind, rain, and the condensation of vapour on the panes."—Dated 16th November, 1861.

51,675. BRISON, domiciled with Rabatel, of 167, Rue Paradis, Marseilles, for "An apparatus for finishing stuffs."—Dated 9th November, 1861.

51,676. CARRIÈRE, of Ganges, for "A cylindric lathe for spinning cocoons."—Dated 14th November, 1861.

51,677. CHAMPAILLER, of 2, Avenue de Noailles, Lyons, for "Manufacture of bobbinet lace."—Dated 12th November, 1861.

51,678. CROMPACH, of 97, Grande Côte, Lyons, for "Manufacture of benzine."—Dated 7th November, 1861.

51,679. DAVID, of 18, Rue de la Bourse, St. Etienne, for "Plates for moving the pile plates on looms for the manufacture of ribbons of cut velvet."—Dated 13th November, 1861.

51,680. DAVID, of 18, Rue de la Bourse, St. Etienne for "A process for regulating the dampness in the pile of ribbons of cut velvet."—Dated 15th November, 1861.

51,681. DEVAUX and SÉCRÉTAN, of 5, Rue Fontaine de l'Aumône, Marseilles, for "Smoothing irons for linen."—Dated 12th November, 1861.

51,682. DORANGEON, of 24, Faubourg des Casseaux, Limoges, for "Handles to the wick holders of aerotic porcelain."—Dated 12th November, 1861.

51,683. DOUBLE, of 362, Rue St. Denis, Paris, for "A kind of comb with ornaments, called 'Regency combs.'"—Dated 24th October, 1861.

51,684. EYMIN, of Vienna, for "A pruhydro-pneumatic apparatus or lift pump without gearings or pistons, and worked without any motive power, and of indefinite power."—Dated 11th November, 1861.

51,685. FLICOTEAUX, of 21, Place Bellecour, Lyons, for "A floating counter."—Dated 13th November, 1861.

51,686. FORVEILLE, of Bourgon, for "A cold process for treating flax."—Dated 11th November, 1861.

51,687. GOUTY, of Bédarieux, for "Manufacture of oleate for scouring wool."—Dated 8th November, 1861.

51,688. GUICHARD, of 22, Rue de Chartres, Lyons, for "A ringing counter for billiards, applicable to their cushions."—Dated 13th November, 1861.

51,689. JACQUEMIN, of Louvroil, for "A mould for casting grates of heating apparatus."—Dated 15th November, 1861.

51,690. LEBRETON and GAZAGNE, of 83, Rue du Faubourg du Temple, and 67, Rue d'Allemagne, Paris, for "A composition for the manufacture of foot coverings and all articles of leather and linen."—Dated 24th October, 1861.

51,691. MALTEAU, of Route du Neubourg, Elbeuf, for "A machine for cleaning cards."—Dated 11th November, 1861.

51,692. MIRAULT, of Route de Vendôme, Blois, for "A lever press without screws."—Dated 11th November, 1861.

51,693. MONY, of Sens, for "Improved ploughs with moveable points and grooves."—Dated 15th November, 1861.

51,694. MOUSSEAU, of 103, Rue Porte-Dijean, Bordeaux, for "Air-holes of ovens."—Dated 13th November, 1861.

51,695. PAGÈS, of 5, Rue des Ecouffes, Paris, for "A kind of hat bodies."—Dated 16th September, 1861.

51,696. RANCUREL, of 124, Boulevart Chave, Marseilles, for "A machine for raising, lowering, and conveying buildings and edifices."—Dated 9th November, 1861.

* For the French Patent Law see No. 228 of this Journal.

51,697. SANDILLON, of 3, Quai Napoléon, Marseilles, for "A system applicable to foot-coverings in general."—Dated 7th November, 1861.

51,698. SCHLUMBERGER and Co., of Guebwiller, for "Improvements in machines for spinning cotton, wool, silk, and other substances."—Dated 5th November, 1861.

51,699. TROUILLAS, of Entraigues, for "A safety railway break."—Dated 11th November, 1861.

51,700. BAILEY, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in breech-loading fire-arms."—Dated 24th October, 1861.

51,701. BARKER, represented by Combres, of 19, Boulevart Bonne Nouvelle, Paris, for "Improvements in signals and their apparatus for communicating from the land to vessels at sea, applicable also to other purposes."—Dated 25th October, 1861.—(English Patent, 25th April, 1861.)

51,702. BERRENS, of 17, Rue Laffitte, Paris, for "A compressed air apparatus for travelling on heavy gradients of railways."—Dated 26th October, 1861.

51,703. BETTEMBOST, represented by Le Blanc, of 2, Rue Ste. Appoline, Paris, for "Improvements in obtaining photographic proofs, and in their applications."—Dated 25th October, 1861.

51,704. BICKFORD, DAVEY, CHANCE, and Co., represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Improvements in fusees for mines, or so-called 'Metallo-filamentous fusees.'"—Dated 25th October, 1861.

51,705. CHENU, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A toilet table with a reservoir."—Dated 26th October, 1861.

51,706. CORBIN and NOTION, represented by Ansart, of 33, Boulevart St. Martin, Paris, for "A roller in a continuous damp state for printing and writing, being a substitute for presses."—Dated 24th October, 1861.

51,707. CORDIER, domiciled with Lafolie, Hotel de Rouen, Rue de Grenelle St. Honoré, Paris, for "A heating apparatus."—Dated 25th October, 1861.

51,708. DANDOIS, of 14, Boulevart des Amandiers, Paris, for "Varnish-coloured mother-of-pearl pictures."—Dated 26th October, 1861.

51,709. DANGER, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in portable chairs."—Dated 24th October, 1861.

51,710. FÉRAUD, represented by Guion, of 29, Boulevart St. Martin, Paris, for "Improvements in warming-pans."—Dated 24th October, 1861.

51,711. GOBERVILLE, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in machine tools."—Dated 24th October, 1861.

51,712. GOUPY and JULIEN, of 28, Rue St. Georges, and 8, Passage St. Louis du Temple, Paris, for "A copying-press."—Dated 26th October, 1861.

51,713. GRUYER, of 59, Rue Meslay, Paris, for "A kind of parasol, called 'Pagoda.'"—Dated 26th October, 1861.

51,714. GRUYER, of 59, Rue Meslay, Paris, for "A kind of parasol, called 'Louis XV.'"—Dated 26th October, 1861.

51,715. GUÉRAIN, of 5, Avenue de Plaisance, Paris, for "Patent washers without pins and slides for carriages."—Dated 26th October, 1861.

51,716. HILL, represented by Courrouve, of 28, Rue Feydeau, Paris, for "Improvements in dials of watches and clocks."—Dated 25th October, 1861.—(English Patent, 26th April, 1861.)

51,717. JOYEUX, of 56, Rue des Cendriers, Paris, for "Handles of smoothing irons for hatters."—Dated 28th October, 1861.

51,718. KARCHER, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "Jets d'eau for toys, flower-stands, &c."—Dated 25th October, 1861.

51,719. LOUVEL, of 30, Rue des Ursulines, St. Denis, for "Applying a vacuum to preserving corn, seeds, and flour."—Dated 26th October, 1861.

51,720. MYST, represented by Combres, of 19, Boulevart Bonne-Nouvelle, Paris, for "A system of parachutes for mines."—Dated 25th October, 1861.

51,721. ORTH, domiciled with Dreyfous, of 20, Rue de Lancry, Paris, for "A kind of soap."—Dated 25th October, 1861.

51,722. PARSONS, represented by Sautter, of 14, Boulevart Montmartre, Paris, for "Improvements in machines for the manufacture of nuts, bolts, and rivets."—Dated 27th April, 1861.

51,723. RENARD, of 22, Rue Jean Jacques Rousseau, Paris, for "A foot warmer."—Dated 25th October, 1861.

51,724. SALISBURY and STARLEY, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in sewing machines."—Dated 24th October, 1861.—(English Patent, 24th April, 1861.)

51,725. SCHARRER, represented by Mathieu, of 45, Rue St. Sébastien, Paris, for "Improvements in furnaces for heating and baking."—Dated 24th October, 1861.

51,726. SOREL and BASSEPORTE, of 17, Rue Fontaine au Roi, and 2, Place de la Rotonde du Temple, Paris, for "Processes for painting and bronzing metals."—Dated 26th October, 1861.

51,727. TIGET, represented by Bonneville, of 39, Rue de l'Echiquier, Paris, for "Manufacture of building materials of moulded and vitrified stone."—Dated 28th October, 1861.

51,728. WAAG, represented by Ricordeau, of 23, Boulevart de Strasbourg, Paris, for "A railway break."—Dated 25th October, 1861.

51,729. WEISS, domiciled with Grisza, of 61, Rue Bombon-Villeneuve, Paris, for "Improvements in planes."—Dated 28th October, 1861.

51,730. BAUDON-PORCHEZ and Son, of Lille, for "A hot air stove for heating plates."—Dated 25th November, 1861.

51,731. BÉTIS, of 95, Rue St. Rémi, Bordeaux, for "Phosphoric candles."—Dated 19th November, 1861.

51,732. D. BEUGNY D'HAGERUE, of 2, Rue Ste. Colombe, Lyons, for "A camp bed, called 'Solferino bed,' forming bedstead, elastic mattress, and bolster."—Dated 18th November, 1861.

51,733. Blanc, of 10, Rue de l'Arbre-Sec, Lyons, for "A kind of loom with its mechanism."—Dated 20th November, 1861.

51,734. Bodon, of 81, Rue de Vauban, Lyons, for "A mode of doubling silk."—Dated 19th November, 1861.

51,735. Caillot, of Cette, for "An improved machine for the manufacture of wooden bungs."—Dated 19th November, 1861.

51,736. Cantillon, represented by Combres, with Masse, of 19, Boulevart Bonne-Nouvelle, Paris, for "A kind of petticoat, called 'Downy petticoat.'"—Dated 28th October, 1861.

51,737. Dequinsieux, of 12, Rue Moncey, Lyons, for "A kind of extinguisher."—Dated 18th November, 1861.

51,738. Desmazures, represented by Basset, of 14, Boulevart Montmartre, Paris, for "Improvements in lighting."—Dated 28th October, 1861.

51,739. Dunègre, of 44, Rue Malesherbes, Lyons, for "So-called 'Fixed dyeing.'"—Dated 19th November, 1861.

51,740. Foucault, of Charleville, for "A mode of heating metals by means of a fire-place combined with the machines and tools that work the same, applicable especially to the manufacture of nails and iron articles."—Dated 16th November, 1861.

51,741. Gilloux, of Carpentras, for "Improvements in lighting by means of mineral oils and lanterns with screens and lengthened chimneys, and in lamps with blow-pipes."—Dated 21st November, 1861.

51,742. Gros and Co., domiciled with Feuillat, of 18, Rue Ferrandière, Lyons, for "A continuous self-acting lubricator."—Dated 19th November, 1861.

51,743. Lemercier, of 48, Route de Paris, Limoges, for "A smoke-consuming apparatus for baking porcelain, or for any other furnace."—Dated 23rd November, 1861.

51,744. Lièvre, represented by Amouroux, of 333, Rue St. Martin, Paris, for "A kind of cravat."—Dated 28th October, 1861.

51,745. Limousin, of 13, Rue des Passementiers, St. Etienne, for "Improvements in the manufacture of velvet of two pieces, and in the deadbeat of Jacquart machines for the manufacture of ribbons."—Dated 19th November, 1861.

51,746. Martin-Deslandes, of 9, Rue Demours, Paris, for "A planing machine applicable to wood works."—Dated 28th October, 1861.

51,747. Moulin, of Blosseville, Bonsecours, for "A kind of work, called 'Imitation of Florentine mosaics.'"—Dated 19th November, 1861.

51,748. Nicholls, represented by Hillou, of 42, Rue Laffitte, Paris, for "Venetian blinds with moveable blades."—Dated 28th October, 1861.—(American Patent, 20th March, 1860.)

51,749. Palayer, of Privas, for "Rests of skeins in throwing silk."—Dated 21st November, 1861.

51,750. Pech, of Rue des Bains, Elbeuf, for "A machine for washing wool."—Dated 22nd November, 1861.

51,751. Pommery, of Bury, for "A mnemonic cubic decimeter for demonstrating the metrical system."—Dated 20th October, 1861.

51,752. Poncelet, represented by Lebeau, of Vervins, for "Casting cylinders of rolling-mills."—Dated 21st November, 1861.

51,753. Pouillet, of 15, Rue de l'Est, Paris, for "Construction of railways by using special rails supported by special rests."—Dated 26th October, 1861.

51,754. Poulier, of 41, Cours Lafayette, Lyons, for "Improvements in thermostatic hot-air stoves."—Dated 19th November, 1861.

51,755. Rebier and Valois, of St. Pierre-les-Calais, for "Bobbinet."—Dated 18th November, 1861.

51,756. Rebour, of Lons-le-Saulnier, for "An apparatus called 'Permanent autographic log,' for measuring and registering, if required, the speed and progress of vessels, the velocity of currents and sub-currents, and the propelling velocity of tides."—Dated 21st November, 1861.

51,757. Saint-Géry, represented by Bresson, of 51, Rue de Malte, Paris, for "A system of casting glass or opal door-knobs, baluster knobs, plates of chandeliers, stoppers, &c."—Dated 28th October, 1861.

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